DOCUMENT RESUME

ED 386 589 CE 069 848

AUTHOR	Ferro, Trenton R., Ed.; Dean, Gary J., Ed.
TITLE	Pennsylvania Adult and Continuing Education Research Conference Annual Proceedings (2nd, Indiana, Pennsylvania, September 30, 1995).
INSTITUTION	Indiana Univ. of Pennsylvania.; Pennsylvania Association for Adult Continuing Education.; Pennsylvania State Univ., Monroeville.
PUB DATE	30 Sep 95
NOTE	107p.
PUB TYPE	Collected Works - Conference Proceedings (021)
EDRS PRICE	MF01/PC05 Plus Postage.
DESCRIPTORS	Adult Development; *Adult Education; Adult Literacy; Business Education; Community Education; Continuing Education; Correctional Education; *Distance Education; Educational Research; Job Skills; Learning Strategies; *Literacy Education; *Nontraditional Students; Older Adults; Prisoners; *Professional Development; Program Development; Standards; Theory Practice Relationship; Womens Education

ABSTRACT

These proceedings contain 11 refereed papers and 2 symposia in which researchers and practitioners share research findings focusing on the link between research and practice in adult, continuing, and community education. "Literacy Skill Standards for the Workplace" (Eunice N. Askov) summarizes efforts leading toward voluntary industry skill standards. "Promoting a 'Culture of Learning' through Creative Self-Expression" (Irene C. Baird) describes a replication of a humanities-oriented model with incarcerated women. "Job Satisfaction and Creativity in the Workplace" (Kathleen L. Cowles) reports results indicating a strong relationship between these variables. "Adult Development--An Integrative Model for Practice" (Trenton R. Ferro) proposes a model that integrates the findings of studies into adult development and proposes uses and implications suggested by that model. "Education and Training in the Virtual Office" (Irene C. Habermann) explores where and whether there is a need for training and the best way of conducting it. "Social Capital and Education" (Carole B. Karinshak) argues that the learning experiences of adults are affected by their segregation as children into groups according to socioeconomic status. "Planning for Change" (Kathleen P. King) explores implications of transformational learning for adult education program development. "The Goodwill Literacy Initiative Evaluated as a Pilot Project Integrating 'JTPA' Policies" (Christine Mollick) reports findings of a study of factors that enhance retention. "Distance Delivery of Graduate-Level Teacher Education" (Melody M. Thompson) proposes that distance education has the potential to offer results beyond those of traditional settings. "Literacy and the Learning Process" (Roberta Uhland) describes learning strategies selected by low-literate adults engaged in self-directed learning. "The Practical Needs of Non-Traditional Women in Higher Education" (Suzanne C. Watson) identifies six areas of practical needs. The symposia are "Internationalism in Continuing and Distance Education" (Jeri L. Childers et al.) and "Why Are We Not Doing Research?" (Patricia Lawler, Trenton R. Ferro). All refereed papers contain references. (YLB)

ED 386 589

Proceedings

of the

Pennsylvania Adult and Continuing Education Research Conference

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Proceedings

of the

Pennsylvania Adult and Continuing Education Research Conference

September 30, 1995

Edited by
Trenton R. Ferro and Gary J. Dean

Proceedings printed by
Adult and Community Education
Indiana University of Pennsylvania
Indiana, Pennsylvania

Introduction

Welcome!

In the winter of 1994 it was only an idea, a dream. Today you are participating in the second annual Pennsylvania Adult and Continuing Education Conference. This is the only Pennsylvania conference dedicated to research in the field of adult education. Its purpose is to provide researchers and practitioners a forum for sharing research findings that focus on the link between research and practice in adult, continuing, and community education.

Students in the Penn State adult education program in Monroeville planted the seed for this conference. They wondered why we couldn't—and how we might—find some avenue that would allow graduate students and practitioners in the field to benefit from the presentations of Pennsylvanians at the annual international Adult Education Research Conferences. This inquiry led to the writing of a grant for funding by Continuing and Distance Education at The Pennsylvania State University to serve as seed money for developing a conference that would accomplish this goal. Subsequent funding came from IUP's College of Education, the Graduate School and Research, the School of Continuing Education, and the Adult and Continuing Education Program. A second grant was funded by Continuing and Distance Education at The Pennsylvania State University to help support this year's conference.

Conversations among faculty and students representing IUP, Penn State (Monroeville), Penn State (University Park), Weidner University, and the Pennsylvania Association for Adult Continuing Education led to the first, and now the second, statewide conference. These individuals, some of whom are listed on the next page, have contributed by participating on the planning committee, reading papers, editing the proceedings, and contributing in other ways.

Good practice both informs, and is informed by, good and relevant research. It is the hope of the planners of this conference that you, the participant, will develop as a practitioner and researcher by learning from, and contributing to, an expanding knowledge and research base, represented in part by the efforts of the contributors included in this volume. We also look forward to your support and involvement in future conferences.

May you grow and benefit from your participation in this conference!

Trenton R. Ferro and Gary J. Dean, Proceedings Editors

Pennsylvania Adult and Continuing Education Research Conference

September 30, 1995

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Pennsylvania Adult and Continuing Education Research Conference

September 30, 1995

Program

8:30 - 9:00 a.m.	**Registration**	Foyer, Stouffer Hall
9:00 - 9:20 a.m.	**Welcome** Dr. John Butzow, Dean, College of Education Dr. Ginger Brown, Associate Dean for Research, The Graduate School and Research	Beard Auditorium
9:30 - 10:20 a.m.	**Concurrent Session I**	
	Ferry, Natalie M. "The Use of Reflection-in-Action by Adult Educators: An Inquiry into Schön's Epistemology of Practice" (Invited)*	Room 113
	Baird, Irene C. "Promoting a 'Culture of Learning' Through Creative Self-Expression: A Humanities-Oriented Model for Incarcerated Women"	Room 112
	Habermann, Irene. "Training in the Virtual Office: Can We Keep Up?"	Room 110
	Mollick, Christine D. "The Goodwill Literacy Initiative Evaluated as a Pilot Project Integrating JTPA Policies"	Room 135
	Thompson, Melody. "Distance Delivery of Graduate-Level Teacher Education: Beyond Parity Claims"	Room 140
	Uhland, Roberta. "Literacy and the Learning Process: A Description of the Learning Strategies Selected by Low-Literate Adults Engaged in Self-Directed Learning"	Room 111
10:30 - 11:20 a.m.	**Concurrent Session II**	
	Schied, Fred M. "'How Did Humans Become Resources Anyway?': HRD and the Politics of Learning in the Workplace" (Invited)*	Room 113

Program Continued

10:30 - 11:20 a.m.	**Concurrent Session II (Continued)**	
	Askov, Eunice N. "Skill Standards for Workplace Literacy"	Room 111
	Cookson, Peter S., and Lawrence, Judith. "Non-Participation of Nurses in Sponsored Continuing Professional Education: An Empirical Test of the ISSTAL Model"*	Room 112
	Ferro, Trenton R. "Adult Development—An Integrative Model for Practice"	Room 140
	Karinshak, Carole B. "Social Capital and Education: Are Some Adults 'Doomed' for Life?"	Room 135
11:20 - 12:15	**Lunch**	Oak Room (Foster Hall)
12:15 - 1:00 p.m.	**Announcements; Keynote Address**	Beard Auditorium
	"Reality and Adult Education Research: Do Opposties Really Attract?" Dr. Gary J. Dean Associate Professor of Adult Education and Chair, Department of Counseling, Adult Education, and Student Affairs Indiana University of Pennsylvania	
1:10 - 1:45 p.m.	**Poster Session**	Rooms 138/139
1:55 - 2:45 p.m.	**Concurrent Session III**	
	Uhland, Roberta, and Quigley, Allan B. "Retention and Literacy: An Investigation of Field Dependence/Field Independence and the Effects of Past Schooling" (Invited)*	Room 113
	Cowles, Kathleen L. "Job Satisfaction and Creativity in the Workplace"	Room 140

Program Continued

1:55 - 2:45 p.m. **Concurrent Session III (Continued)**

King, Kathleen P. "Planning for Change—Transformational Learning and Its Implications for Adult Education Program Development: A Review of the Literature" — Room 111

Schied, Fred M. "Critical Postmodernism and Learning to Work: An Examination of Training and Development in the Workplace"* — Room 112

Watson, Suzanne C. "The Practical Needs of Non-Traditional Aged Women in Higher Education" — Room 135

2:55 - 3:45 p.m. **Symposia**

Childers, Jeri; Shafer, Dehra; Hodes, Carol; Nouri, Vida; Dwyer, Carol; Spielvogel, Eric; and Snetsinger, Wendy. "Internationalism in Continuing and Distance Education: The Dynamics of Research and Practice" — Beard Audtiorium

Lawler, Patricia A., and Ferro, Trenton R. "Why Are We Not Doing Research?" — Rooms 138/139

*Paper not received in time to be included in Proceedings.

Keynote Address

"Reality and Research in Adult Education: Do Opposites Really Attract?"

Gary J. Dean, Ph.D.
Adult and Community Education
Indiana University of Pennsylvania

Gary Dean is Associate Professor of Adult and Community Education at Indiana University of Pennsylvania (IUP) where he also serves as Chairperson of the Department of Counseling, Adult Education and Student Affairs. He received his doctorate in adult education from The Ohio State University in 1987. His M.A. was also earned at Ohio State in 1982, and he graduated from Miami University (Ohio) with a B.S. in Education in 1972.

Dean has worked as a Drug and Alcohol Rehabilitation Counselor and Education Specialist for the U.S. Army and as a career counselor, counselor supervisor, and trainer of career counselors for the Ohio Bureau of Employment Services. He also served as a graduate assistant developing training programs at the National Center for Research in Vocational Education, The Ohio State University.

Dean has recently published a book entitled *Designing Instruction for Adult Learners*. His interests include developing instructional materials for adult learners, adult career development and transition, community education and development, research in adult education, literacy, and basic education. In addition, he has extensive consulting experience with community agencies, hospitals, government, and private industry.

Dean's activities (in addition to teaching at IUP) have included directing a Student Literacy Corps, working with displaced workers, and serving as co-editor for the *PAACE Journal of Lifelong Learning*, the professional journal of the Pennsylvania Association for Adult Continuing Education.

Proceedings of the

Pennsylvania Adult and Continuing Education Research Conference

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PA-ACERC

REFEREED PAPERS

Pennsylvania Adult and Continuing
Education Research Conference

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1995 Pennsylvania Adult & Continuing Education Research Conference

Refereed Papers

LITERACY SKILL STANDARDS FOR THE WORKPLACE

Eunice N. Askov

ABSTRACT: Skill standards define what workers should know and be able to do. They provide the common framework between job requirements, education and training (whether preparatory or continuous learning at the work site), with possibly further definition through certification. The skill standards movement is being driven by business with governmental support. The goal is to create a workforce that can function in a high performance work environment. The concern is that the current workforce lacks the necessary skills and that schools are not educating students for the restructuring workplace. Currently, 22 industry organizations are funded to develop skill standards for the occupations within their industries. Simultaneously, the U.S. Department of Labor is supporting the revision of the Dictionary of Occupational Titles through research with job incumbents and others to determine the skills needed for various jobs. All of these efforts are leading toward voluntary industry skill standards to define what workers need to know and be able to do. These efforts are summarized in this paper.

INTRODUCTION

Skill standards are an attempt to define outcomes — what workers should know and be able to do. By defining the outcomes, educators can plan instruction so that it leads to the achievement of those outcomes. Skill standards also help students see what they need to know and be able to do as they participate in various levels of adult education programs. If certification is tied to accomplishment of skill standards, then students have portable skills that they can take anywhere in the country. Employers can set job expectations for new or advancing employees based on the skills standards certificates. Employees can plan their own training opportunities to ensure that they are acquiring necessary new skills.

The skill standards movement calls for the establishment of voluntary industry skill standards which will inform workers as well as companies about the skill requirements for various occupational clusters. The U.S. Departments of Education and Labor are currently funding industry associations and others to determine the skills needed to work in such industries as electronics and retail. Simultaneously, the Department of Labor is also supporting the revision of the Dictionary of Occupational Titles through research with job incumbents and others to

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Eunice Askov is Director of the Institute for the Study of Adult Literacy, The Pennsylvania State University.

determine the skills needed for various occupations. All these efforts include the identification of basic skills needed for the workplace and grow out of the original SCANS effort which created a framework for workplace skills.

The Literacy Leader Fellowship research project at the National Institute for Literacy is also addressing this area. The audience for this report, which will be available from the National Institute for Literacy and entitled *Framework for Developing Skill Standards for Workplace Literacy* (Askov, in preparation), is adult educators who are working, or plan to work, in workplace literacy or workforce preparation programs. During the fellowship period, extending from October 1994 through September 1995, for a total of 12 weeks, selected curricula created as part of the National Workplace Literacy Program (NWLP), funded by the U.S. Department of Education, were reviewed to determine the basic skills that are most frequently taught in various workplaces, especially those adopting high performance work patterns. Domains in which skill standards for workplace literacy need to be developed — especially for those basic skills needed for high performance work organizations — are identified; these domains have been anchored with examples from the NWLP curricula. Descriptions of the various efforts related to setting standards for basic skills in the workplace are also provided for practitioners who may not be aware of these ongoing efforts.

NATIONAL EDUCATION GOALS

Numerous reports issued during the 1980's testified to the rising skill needs in the workplace and the possibly declining literacy skills among the workforce. The creation of education goals is viewed as fundamental to establishing a coordinated educational system that is responsive to the needs of the workplace.

In 1989, the nation's Governors and the President convened the Education Summit which led to the adoption of six National Education Goals. In 1994, Congress adopted the six goals and added two more goals. The goal that is particularly relevant to adult literacy is now #6 that by the year 2000: "Every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship." (National Education Goals Panel, 1994).

Next, the National Education Goals Panel was established to monitor and report annual progress toward accomplishing the goals at the federal and state levels. The *Goals 2000: Educate America Act* (1994) established the Goals Panel as an independent federal agency and expanded its charge to include educational reform. The purpose is to help local communities set high expectations for all learners, build an accountability system to measure and report progress, and set performance checkpoints.

The National Institute for Literacy (NIFL) engaged in a joint effort with the National Education Goals Panel to arrive at a functional definition of Goal 6 (adult literacy) that can guide the

improvement of literacy services as well as the measurement of success. NIFL asked adult learners across the country to respond to the question: "What skills and knowledge do adults need to be literate, to compete in a global economy and to exercise the rights and responsibilities of citizenship?" The responses from 1500 adult learners were analyzed ethnographically; four purposes for literacy (see Chapter 3) were identified using the framework described in the report from the NIFL, *Equipped for the Future: A Customer-Driven Vision for Adult Literacy and Life-Long Learning* (Stein, 1995).

In a related effort NIFL is also building state performance measurement, reporting, and improvement systems (National Institute for Literacy, 1995). The criteria for a state accountability system, in measuring results, not processes, is moving toward establishing a flexible framework for systemic reform that may involve the setting of standards.

To check on progress in attaining the adult literacy goal, the National Adult Literacy Survey or NALS (Kirsch, Jungeblut, Jenkins, & Kolstad, 1993) was developed and administered by the Educational Testing Service (ETS). The results indicated that nearly half of America's adult population scored in levels 1 and 2 of a 5-level scoring system, making their participation in the changing workplace problematic. Low NALS scores also correlated as expected with unemployment and dependence on welfare as well as with other personal and societal problems.

SECRETARY'S COMMISSION ON ACHIEVING NECESSARY SKILLS (SCANS)

The Secretary of Labor 's Commission (U.S. Department of Labor, 1991) included business, labor, government, and education representatives in attempt to create a broad base for deciding the skills needed for jobs in the modern workplace. The Commission identified five broad skill domains (ability to use resources, interpersonal skills, information, systems, and technology) with three foundation areas (basic skills, thinking skills, and personal qualities). Specifically, the Commission was charged to identify the skills needed for employment, propose acceptable levels for those skills, suggest effective assessments for those skills, and develop a strategy for broad dissemination (Peterson, n.d.).

The product of the job analysis research that ensued, which was limited in scope by the resources provided, provided definitions of 37 skills and competencies thought to be necessary for entry-level jobs in the future. Furthermore, examples of job tasks to illustrate applications of these skills helped describe levels of proficiency needed for different jobs as well as guide the development of assessment tools and instructional curricula. An example of how the SCANS skills have been used in curriculum development for the Tech Prep program (which emphasizes coordinated academic and vocational experiences in preparation for work) can be seen in *Toward Active Learning: Integrating the SCANS Skills into the Curriculum* (Crabbe, 1994).

The SCANS skills provided a prototype for the larger scale effort of revising the *Dictionary of Occupational Titles* also funded by the U.S. Department of Labor. The research effort also gave investigators an opportunity to pilot the methodology that was used in the later study.

REVISION TO THE *DICTIONARY TO OCCUPATIONAL TITLES*: O*NET

The Occupational Information Network or O*NET (U.S. Department of Labor, 1995) is the result (still in draft form) of a long process of revision to the current *Dictionary of Occupational Titles* (DOT) to make the system responsive to the skills that are needed for the modern workplace. The plan is for O*NET to provide the national framework or infrastructure needed to match workers' skills to restructuring workplaces and to training opportunities in the workplace, and future workers to education and training in preparation for the workplace. O*NET will provide electronic access to worker skill and job requirement information that has been scientifically gathered and verified.

Linking worker requirements and occupational requirements are "experience requirements" such as training and licensing. The draft O*NET model (U.S. Department of Labor, 1995, p. 3) is displayed in Figure 1.

Workplace basic skills, such as reading and writing, are separated from the more general abilities, interests, and work styles, and are considered fundamental to all jobs to some degree. Cross-functional skills are more generic skills, such as information gathering and organizing, that occur across a wide variety of jobs. (The five broad skill domains of SCANS are similar to the cross-functional skills identified in the O*NET.)

The current DOT has such an occupation-specific focus that it is difficult to make cross-occupation comparisons or to consider broad occupational clusters. O*NET, in contrast, will enable users to organize job-specific information into broad, related occupational clusters based on empirical data, making it possible for users to sort occupations based on skill requirements. Because descriptors will not be rigidly referenced to existing job titles (as in the DOT), they will help identify emerging jobs and occupational clusters.

In summary, O*NET (U.S. Department of Labor, 1995) will enable users to: "(1) answer real world questions about matches between skills, job and educational requirements; (2) identify skills and education required for entering the workforce or transferring occupations; or (3) identify jobs available given particular combinations of skills and educational background (p. 7)." The skill standards movement can benefit from the O*NET database in specifying occupational requirements which can be linked to assessment , training opportunities, and perhaps certification.

INDUSTRY ORGANIZATIONS

Just as O*NET was an outgrowth of the recognized need for an overarching framework and common skills language, the skill standards projects reflect a similar need. Funded by the U.S. Departments of Labor and Education, 22 industry associations and organizations are analyzing their occupational clusters to determine the essential job tasks and the underlying knowledge,

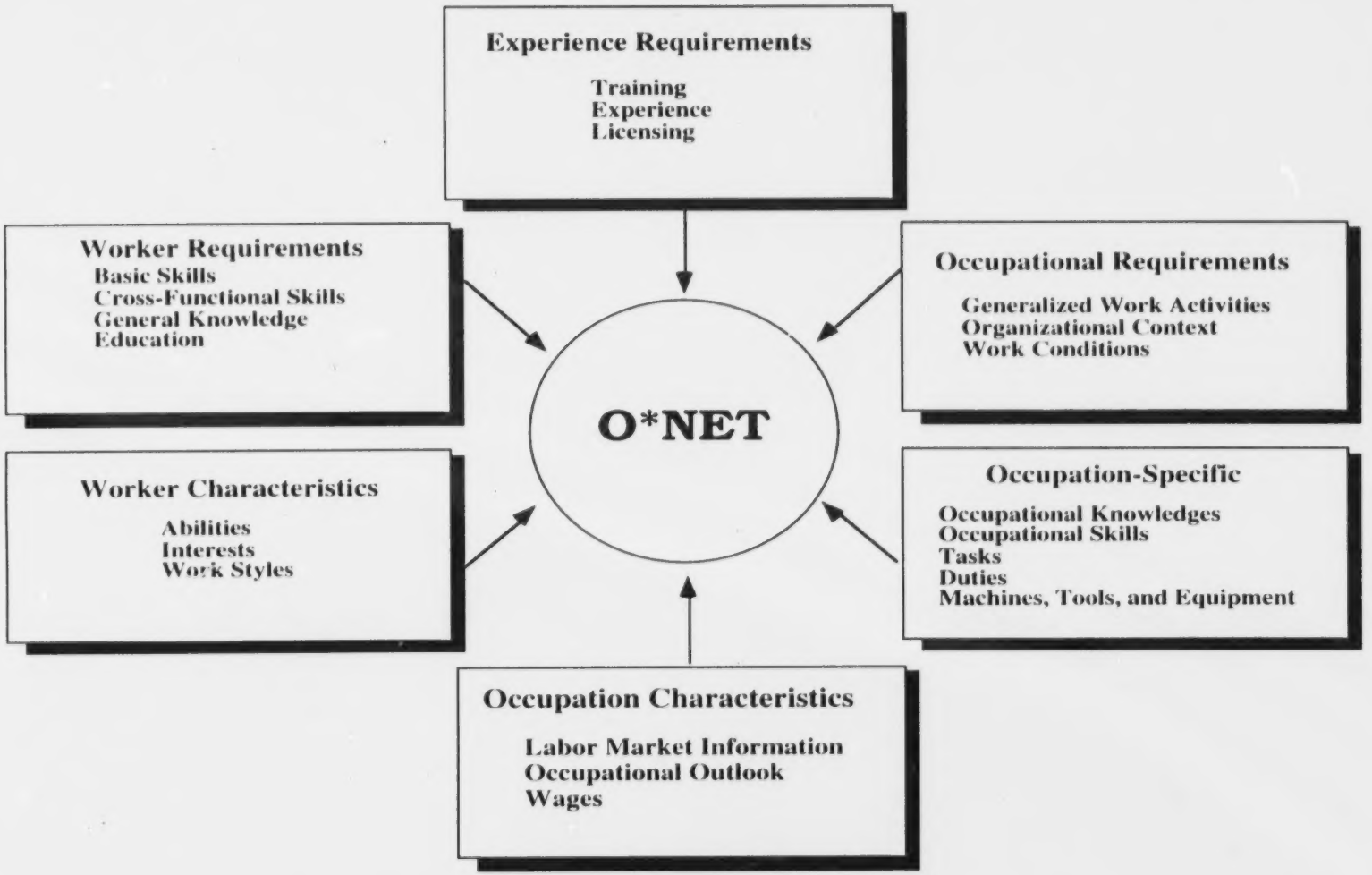

Figure 1. O*NET Draft Content Model

skills, and abilities that relate to performing those tasks. The *Occupational Skill Standards Projects* (1994) provides a description of the 22 projects with a directory of contact people. Wills (1993) describes the methodology being implemented with the Education-funded projects as well as provides a good overview of the advantages of a competency-based system of skill standards that builds into the education and training curricula the workforce skill and knowledge requirements identified by industry. She envisions a framework for generating valid and reliable skill standards, assessments, and certifications that should also be benchmarked to international standards. She cautions that the appropriate role for education and training institutions is the delivery of services, not the development of the skill standards which effort should be led by industry in order for them to be realistic and accepted by industry.

Problems have become evident as the 22 industry associations attempt to set skill standards for their occupations. Some occupations, such as customer service worker, cut across industry groups; how much specialized knowledge is needed of the industry in order to be a skilled customer service worker in electronics or retail, for example? Furthermore, there is great variability in the level of specificity of the skill standards as well as different methodologies for determining the skill standards. Setting the performance levels required for entry-level or expert workers is also variable across industries; many of the skill standards projects have not yet reached the point of establishing levels of competence for the various jobs within the occupational cluster.

NATIONAL JOB ANALYSIS STUDY

Also funded by the U.S. Departments of Labor and Education, the National Job Analysis Study or NJAS (American College Testing or ACT, 1994) is developing assessment measures of workforce competencies and skills needed for job success in high performance work organizations (HPWO). The result will be a scientifically determined set of general or core skills that every worker needs, regardless of occupation, at various job tenure levels that are essential to working in the HPWO environment. The NJAS will provide a common language that will link generic and job-specific skills, resulting in "a definitive foundation on which to base assessments, work training programs, educational curricula, and comprehensive descriptions of job requirements (p. 1)."

Growing out of the SCANS effort, the NJAS includes construction of criterion-referenced assessments of the identified competencies and skills, measuring whether or not a worker has mastered a particular skill, rather than how well s/he does in relation to other people. ACT is working with several of the 22 projects that have been funded to develop voluntary industry standards.

The Training Technology Resource Center (TTRC) of the U.S. Department of Labor, Employment and Training Administration, has an electronic *Skill Standards and Certification Reference Guide* found by selecting the Skill Standards option on the TTRC Main Menu. Menu options include General Information (about skill standards), National Skill Standards Board (including

legislative background), Consultants Directory, Practices (industry, international, and state practices), Project Profiles (about the 22 voluntary industry projects), Research Topics (including annotated bibliographies), Organizations, and Products (developed by vendors). Technical assistance and further information may be obtained by telephone from (800) 488-0901 or (202) 219-5600.

Another source of information about skill standards is from the American Training Standards Institute (ATSI), a not-for-profit skills research corporation, with its STEPS (Skills Training Evaluation Procedures and Standards) initiative. Members of the corporation are from private industry, universities, research organizations, government agencies, associations, and concerned individuals. ATSI's mission is to enhance national economic competitiveness by establishing a skills language, an array of measurable skill assessment tools, skills-based training courses and certification, and a lifelong learning process that will encourage workers to acquire new skills. The vision is to build a high performance workforce using new skills standards and advanced telecommunications and computing technologies. Information on these skill standards efforts may be downloaded electronically from ATSI's homepage (http://steps.atsi.edu).

CONCLUSION

Skill standards define what a person should know and be able to do. Concerns about the quality of the workforce, both current and future, have led to the pressure to develop skill standards. The movement to develop standards comes from the sense that the world is changing rapidly and that our schools are somehow not keeping pace. Industry-based skill assessment and certification offer an attractive strategy for workforce development and an opportunity to create a system of occupational preparation. Skill standards create a "common language" and framework that communicate occupational requirements, including basic skills, to current and future workers, companies and their training departments, and educational institutions (National Alliance of Business, 1995a).

The National Council on Education Standards and Testing (1992), in a report to the Congress, the Secretary of Education, the National Education Goals Panel, and the American people, recommended the adoption of high education national standards for all students and voluntary assessments that are linked to the standards. The report then recommended specific components for these standards that should be developed at the national and state levels.

While the business community is moving toward skill standards, it wants to move slowly in establishing a national system, especially one with government intervention (National Alliance of Business, 1995b). Businesses prefer voluntary standards that can help them learn from each other. They want to involve the educational community in the effort to develop skill standards. Adult educators will need to become involved with these efforts when delivering literacy services that are tied to workplace education or workforce preparation.

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1995 Pennsylvania Adult & Continuing Education Research Conference

Refereed Papers

PROMOTING A "CULTURE OF LEARNING" THROUGH CREATIVE SELF-EXPRESSION: A HUMANITIES-ORIENTED MODEL FOR INCARCERATED WOMEN

Irene C. Baird

ABSTRACT: Prison studies cite two alarming figures: an almost seventy five percent rate of illiteracy among the incarcerated and, within the decade, an almost three hundred percent increase in the prison female population. Replicating a humanities-oriented model developed with homeless women, a group of incarcerated women confirmed the viability of the humanities format for promoting and enhancing both learning skills and a sense of self as an individual and as a member of the community. Their perceptions about learning also are consistent with those of the homeless women and indicate a need for continued research to promote a "culture of learning" among these marginalized female populations.

INTRODUCTION

The problem underlying the purpose of this study is one of how best to promote learning to reduce unsocial behavior and to enhance self-esteem among the female prison population that is increasing at an alarming rate. The literature addresses two distinct aspects of the issue: the relationship between insufficient literacy and unsocial behavior that often leads to crime and the relationship between insufficient self-esteem and behavioral problems. From a non-gender specific perspective, some prison literacy researchers find that education "promotes civility, develops cognition and encourages confidence ...," that reading an enjoyable book, for example, reduces stress levels associated with incarceration and enhances self-esteem (Newman, Lewis, Beverstock, 1994, pp 48-49). Though the studies advocate for the inclusion of as paradoxical an approach as a humanities-oriented one, they do not describe specific programs nor do they explore what learning means to the incarcerated. Rather, they refer to successful programs' inclusion of techniques that will have an impact on inmates' thinking.

The issue and effect of poor self-esteem among women has received significant attention, particularly since Gilligan's (1982) and Belenky's et al (1986) research on how women find themselves and "their voices". These and other studies addressing the role of social class or the impact of relationships on how a woman defines herself (Merriam & Caffarella, 1991) areconducted primarily with white, middle class participants who belong to society's mainstream.

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The purpose of this study, therefore, was to repeat a humanities-oriented model undertaken with homeless women (Baird, 1994) with a group of incarcerated women of diverse racial and ethnic backgrounds. The intent was (1) to promote and enhance learning skills within a format that explored the meaning of self as an individual and as a member of a community through reading, reflection, discussion, creative self-expression, and (2) to explore, also, what learning meant to these women. Since the model is nontraditional to adult education for a prison population, the study represents the early phases of action research. The learning product from this study, a publication of the women's writing -- following reading, reflection and discussion--confirmed its viability as a learning medium and esteem builder. These techniques should be useful to practitioners who are looking for new, innovative approaches to promote a "culture of learning" among a hard to serve population.

PERSPECTIVES

The humanities model was selected originally for the project with homeless women because humanities has been defined as a way of looking at the meaning of life, a way of looking at what we do and what it means to us. Its replication for this study was reinforced by several aspects of the Newman, Lewis, and Beverstock (1994) research on education's socializing effect on inmate populations and on cognitive training which incorporates critical thinking about self, society and learning, particularly within a humanities context. It was appropriate, therefore, for women who have experienced traumatic life crises to utilize a humanities-oriented model, to read, discuss, reflect and develop self-expression for solving real-life problems.

SITE

For access to the meeting room for this project, within a county prison, it was necessary to be "buzzed through" three heavy sets of doors, barred or solid and painted black or dark green. The room itself was separated from the guards' station and a hallway by clear glass walls. As a result, activity was observed by prison authorities and other inmates as well as by two different groups of high school students who toured the facility while the program was in progress. Opaque glass bricks formed the exterior wall of the room; the women do not have exposure to natural light except when on a work-release project. Though they had been cleared to participate in the program, they could be called out by authorities for varied reasons. In addition, sessions were cancelled several times for "lock down," a period when women were confined to their cells as a punitive measure for infraction of a regulation. Facilitators, as with all prison volunteers, underwent a pre-program police check, were photographed against the same height chart used for offenders, and were issued an identification badge. It, car keys and books, paper and pencils were the only allowable materials and could be subject to inspection.

METHODOLOGY

Because this study centered on meaning, of self, society and learning, the research was conducted within a qualitative paradigm. With support from correctional institution authorities,

the study involved twelve women who volunteered to participate in ten weekly one and half to two hour sessions. Six were African-American, five Anglo-American and one native American. They ranged in age from early twenties to early forties. In order to establish trust and encourage participation, unless they volunteered information their privacy was respected in terms of reasons for incarceration and pre-prison socio-economic backgrounds.

As with the project with homeless women, there was no pre-testing for literacy levels. Again, to establish trust and remove the risk of creating barriers to participation, it was decided to try the reading, discussion and reading and to assess abilities by observation. Had there been problems, the material would have been read prior to discussion; the writing component could have been addressed by recording and then transcribing the women's words. Contrary to Newman, Lewis, Beverstock (1994) findings of high levels of illiteracy among the incarcerated, this particular group had no problems with the format's techniques. Rather, it demonstrated strong levels of reading, comprehension and writing.

The process involved promoting a "culture of learning" by introducing participants to work of women authors of similar race, class, experience; by engaging them in reflecting on content for meaning and understanding; and by encouraging them to find their own "voices" in a written format of their choice. Each week the writing was duplicated verbatim on computer for the women's personal files. The focus was on understanding, reflection, self-expression and not on grammar, spelling and punctuation. In addition to the selection and compilation of examples of their work for their publication, the women agreed to an informal taped, group interview; they shared their reactions to the humanities format, in particular, and their perspective on learning, in general.

RESULTS

The tangible and notable product of the study is a publication, *Expressions from the Inside*, both title and contents having been selected by the women. The writing, in poetry and prose, responded to recollections, wishes, life turning points, reactions to being in prison and family histories, including dialogue; it also demonstrated an impressive caliber of creative writing ability. As the weeks progressed, the women requested additional poetry and articles for reading and reaction between sessions. They shared that they bonded as a group in their cell block and spent hours critiquing each other's writing efforts. They looked forward to these sessions since the only programs offered them were on substance abuse, bible study, and adult basic education (ABE), General Education Diploma (GED), and literacy classes.

The group interview revealed enhanced self-esteem and comments of learning progress and growth from ABE/GED instructors. One participant who felt her writing ability was affirmed with this format said, "My self-esteem took off a lot. Because in here you don't really get a lot of recognition. I mean, the most you could hope for is one inmate recognizing that you've done something nice for them and for them to say thank you or whatever . . . . I was on cloud nine [these] weeks." Another respondent gave this perspective:

> [to] look at this group as kind of a key to unlock some cell that I was in. . . . It taught me to express myself. It taught me that when things are inside me that I don't understand, if I put them down on paper they make sense . . . . The best thing that I learned, expressions from the inside they were really part of me that I chose to shove inside me . . . things that hurt me that I didn't know how to bring out. I think this group is really good and I learned from . . . a lot of poets and stuff. Learning to me is just an all around thing of becoming wiser, becoming, learning how to live, learning to interact with others.

One woman was surprised that learning could be fun; another transferred the inquiry technique to not only reading the newspaper but questioning the reliability of the printed word. She explained, "I was aware of [an] error and . . . it wasn't noticeable unless you in-depth read it and I've never really paid attention to things like that."

Addressing another aspect of the intent of the program, a woman shared,

> One of the good things about this particular group for me was it gave me a chance to read a lot of poetry by authors I had kind of like heard about or maybe glanced through some of their material but never sat down and picked it apart like we got a chance to do here to really grasp . . . . Maybe we didn't get the full meaning but I think we got enough of the meat of it.

She added, " It also gave me a better insight into the women that I live with here . . . like . . . you shared about how you grew up and some of the things that shaped and molded you . . . gave me a better understanding of the people I live around." Succinctly, to many the learning was growth, understanding, the being open to information and being able to apply it to one's life. The participants described this as hands-on learning, the medium which they favored. There is no way to assess, as yet, what long-term results will accrue in terms of learning, self-esteem and social behavior.

SIGNIFICANCE

The study is significant from several perspectives. It employs a format that is non-threatening, challenging and fun in spite of the prison site. It demystifies literature and confirms it as a learning tool, especially when it is relevant to the adult learners' lives. It allows participants to make connections to famous authors with similar experiences, thereby encouraging them to undertake their own writing. It values the adult learner's ability to create, thereby strengthening her self-esteem. It is attentive to the critical thinking component, useful not only as a reflective tool during incarceration but as a useful skill transferrable to life "on the outside." Since the model is to be continued, both in prison and with parolees in rehabilitation, future results will attest to its long-term efficacy as a means of promoting learning, especially for marginalized women. In addition, their perceptions of what learning means to them (growth, understanding), over an extended period of time, will contribute useful information to both researchers who focus on theory andpractitioners who turn theory into practice.

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1995 Pennsylvania Adult & Continuing Education Research Conference

Refereed Papers

JOB SATISFACTION AND CREATIVITY IN THE WORKPLACE

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ABSTRACT: Creativity, particularly as it relates to an organization's ability to adopt innovations and remain competitive in a rapidly changing marketplace, has received increasing attention over the past forty years. Prior research has determined that the most effective way to improve the creativity of individual workers is to develop an organizational environment that supports creativity. The purpose of this study was to determine whether or not a relationship exists between employee job satisfaction and the perceived level of organizational support for creativity in the workplace. Results indicate that there is a strong relationship between these variables for workers in all job classifications studied, further indicating that the conditions which support creativity also provide a satisfying work environment for adults.

INTRODUCTION

Creativity is not a new topic, although it has historically undergone long periods of neglect. Dr. J. P. Guilford, in his 1950 inaugural address as president of the American Psychology Association, described education's neglect of creativity as "appalling," noting that fewer than two-tenths of one percent of the books and articles appearing in the index of *Psychological Abstracts* over the preceding quarter century were concerned with the topic of creativity. In the early 1950's, Alex Osborn (a major advertising executive) published several books about developing one's creative abilities and originated the term "brainstorming." Since that time, creativity and innovation have "emerged over the last decade as possibly the most fashionable of social science areas" (Downs & Mohr, 1976, p. 700), and research concerning strategies to encourage these desirable traits has proliferated. (Creativity is typically defined as the recombination of ideas in new ways, while innovation is the introduction of the creative idea into organizational practice.) Most of this research has occurred in organizational settings, although creativity also has an important role to play in the field of adult education.

REVIEW OF THE LITERATURE

A 1990 survey of 2,600 large American corporations found that "32% offered creativity [training]...a 540% increase from the four previous years" (Fernald & Nicolenko, 1993, p. 219). It has been predicted that this trend will continue, since "organizational growth and even survival can be tied directly to an organization's ability to produce (or adopt) and implement new services, products or processes" (VanGundy, 1987, p. 358). Rapid technological growth in the global marketplace has forced corporations to become more flexible, multi-cultural, and innovative in

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order to remain competitive. An increasing number of organizations have come to realize that this cannot be accomplished without a creative workforce, since organizational innovation cannot occur without the catalyst of creativity from individual workers (Knight, 1967).

Although training can effectively increase a worker's ability to be creative (Rose & Lin, 1984), training alone is not sufficient to increase creativity in the workforce. Professional creativity trainers agree that "even if an employee possesses all the personal elements necessary for creative output...nothing is likely to happen if an organization does not establish *a creative climate* [italics added] (Carnevale, Gainer & Meltzer, 1990, p. 203). An organization's "climate" or "environment" has been defined as "the psychological atmosphere of an organization...which results from the behavior and policies of members of the organization, especially top management" (Pritchard & Karasick, 1973, p. 126). Researchers who have studied the relationship between creativity and organizational climate agree that a non-supportive climate will suppress creativity (Aiken & Hage, 1971; Knight, 1967; Pritchard & Karasick, 1973). And yet, a recent study indicated that even though most organizations surveyed reported that they wanted their employees to be more creative on the job, fewer than 25% had taken formal steps to establish a creative climate in the workplace (Fernald & Nickolenko, 1993).

The literature is in general agreement as to which conditions in the organizational climate support and which suppress creative thinking. Because creativity has to do with the recombination of ideas in new ways, creative workers need access to a variety of information at all levels within the organization. Strict hierarchical barriers that prevent communication between workgroups stifles the possibility for these recombinations to occur. In fact, any kind of organizational rigidity is likely to suppress creativity (Roweton, 1989). Creativity requires an atmosphere where employees have enough freedom and support to work on "off-the-wall" ideas with energy and passion, where all workers are encouraged to freely communicate throughout the organization, where "change" is clearly an organizational possibility, where workers are given the authority to pursue potential leads, and where people are rewarded (both monetarily and personally) for their creative ideas (Knight, 1967; Koprowski, 1972; Von Fange, 1959). On the other hand, creativity will tend to be stifled in an atmosphere that is organized along strict hierarchical lines of command, where no employee is trusted with a significant amount of information or authority, where a thick "Policies and Procedures Manual" predetermines every possibility, and where short-term profit is the primary corporate goal (Knight, 1967; Koprowski, 1972).

Unfortunately, the description of a "creativity-inhibiting" organization is strikingly similar to the classical and bureaucratic organizational forms described by Fayol and Weber in the early 1900's, but still very much alive today (Stoner & Freeman, 1992). The clear-cut lines of authority and rigid adherence to preset policies that characterize the classical organization have allowed managers to effectively control large numbers of workers and their output. However, it is often the case in today's turbulent marketplace that "innovation dies aborning because the organization lacks the characteristics that facilitate change" (Aiken & Hage, 1971, p. 66). Companies that have grown successful in the past under classical theories of management are understandably reluctant to abandon them for the more intuitive, flexible management that encourages creativity.

Today's corporations need assistance in identifying areas of their organization where worker creativity is suppressed and in developing workplace environments that are more supportive.

IMPORTANCE OF THE PROBLEM

Most authors clearly identify the need for increased levels of creativity in the workforce and their recommendations for changing the organizational climate to make it more amenable to creativity are fairly standard, as discussed previously. What seems to be lacking are instruments that managers could use to evaluate the climate for creativity in their organizations and to determine what steps they might take to make the workplace more supportive of creativity, if necessary.

Hypothesizing that job satisfaction might be an indicator of organizational support for creativity, several studies have explored the relationship between satisfaction and *innovation* (defined as the *organizational* adoption of a worker's creative efforts) (Hage & Aiken, 1967; Pritchard & Karasick, 1973). The researchers found that innovation was related to both worker satisfaction and organizational climate. However, since these studies involved the creativity of large groups of people and complex systems, it is not clear that the results are helpful in understanding or predicting the creativity of individual workers. The finding of a relationship between job satisfaction and workplace environment takes on additional importance when the role of job satisfaction in productivity is considered. While a causal relationship has not been empirically determined, an extensive series of studies (performed by the Vocational Psychology Research Institute at the University of Minnesota) suggests that a high level of employee job satisfaction "should maximize productivity and minimize turnover, absenteeism, tardiness, accidents, and injuries" (Benson, 1988, p. 147).

METHODOLOGY

The purpose of this study was to determine whether or not a relationship exists between employee job satisfaction and the perceived level of organizational support for creativity in the workplace. Questionnaires measuring these two variables were obtained or developed and distributed to the employees of a wide variety of organizations. Each participant was asked to complete two questionnaires: 1) the Minnesota Satisfaction Questionnaire (short-form), a list of twenty work reinforcers that have been shown to reliably measure job satisfaction (Weiss, Dawis, England, & Lofquist, 1967); and 2) the Workplace Profile, a list of ten workplace environmental descriptors that have been identified in the literature as conditions that are typically present in a workplace environment hospitable to creativity. (The conditions that respondents were asked to compare to their own workplace included worker autonomy, organizational responsiveness to new ideas, openness of communication, job cross-training, and organizational willingness to change.)

Participants were selected from a broad range of organizations and professions. Eighty-seven workers completed both questionnaires, representing 27 Managers, 20 Blue Collar or Clerical workers, 18 skilled Professionals, and 17 Educators. The size of the organizations employing the

participants was approximately equally divided between small (fewer than 100), medium (100 - 999), and large (1,000 or more employees). Both questionnaires were presented in a Likert-scale format. Completed questionnaires were scored using assigned value labels, totaled, and analyzed using a Macintosh Statview program.

FINDINGS

Data analysis indicated that a strong and significant relationship ($r = .65$, $p = .0001$) exists between job satisfaction and the level of support for creativity in the workplace (results are summarized in Table 1). These findings were statistically significant (at various levels) for men, women, employees of large, medium and small organizations, and employees of all job classifications (including Managers, Educators, skilled Professionals, Blue Collar, and Clerical workers). Managers demonstrated the strongest relationship between job satisfaction and workplace creativity, followed by Blue Collar and Clerical workers. Educators and Professionals showed weaker (although statistically significant) relationships.

Employees of large organizations showed the strongest relationship between job satisfaction and workplace creativity, followed by employees of medium sized organizations, and small organizations. The responses of all five job categories showed a statistically significant relationship between scores on both questionnaires, although some of the relationships were stronger than others.

Table 1
Correlation Coefficients for Comparison of Total Minnesota Satisfaction to Workplace Profile Questionnaire Scores for Selected Groups

	N	lp	
GENDER			
Men	30	0.687	0.0001*
Women	55	0.617	0.0001*
No Response	2		
ORGANIZATION SIZE			
Large organizations	28	0.775	0.0001*
Medium organizations	26	0.655	0.0003*
Small organizations	28	0.387	0.0417*
No Response	5		
JOB CATEGORY			
Managers	27	0.756	0.0001*
Blue Collar Workers	9	0.718	0.0293*
Clerical Workers	11	0.625	0.0397*
Educators	17	0.540	0.0254*
Skilled Professionals	18	0.447	0.0452*
No Response	5		
TOTAL PARTICIPANTS:	87	0.65	0.0001*

* significant at $a < .05$

DISCUSSION

The results of this study indicate that workers who are supported in their creativity on the job tend to be satisfied with their jobs, while workers who are not supported tend to be dissatisfied. The fact that Blue Collar and Clerical workers were second only to Managers in the strength of this relationship, indicates that creativity in the workplace is important to people at all levels of employment, including those that are usually not considered "creative." Popular belief holds that only a small minority of adults are creative—that the majority of us both want and require careful direction in the performance of our tasks. To the contrary, this research strongly suggests that (even though we might not recognize it as "creativity") most of us feel a strong need to personally express ourselves through the unique contributions that we bring to our work and feel dissatisfied when we are not permitted to do so.

IMPLICATIONS

For Business. If the literature is correct in concluding that the ability to innovate is necessary for organizational survival in today's marketplace and if creative workers are a prerequisite for innovation, it is critical that organizations develop a better understanding of the dynamics of workplace creativity. Further, if the lack of support for creativity in the workplace leads to worker dissatisfaction and the potential for lowered productivity, increased turnover, and increased injuries, there is a clear and calculable cost to suppressing creativity in the workplace—beyond the incalculable cost of missed opportunity and innovation.

For Adult Education. Malcolm Knowles, one of the primary theorists in the field of adult education, defined the role of the adult educator: "to develop a total environment conducive to human growth and self-actualization" (Knowles, 1980, p. 38). Since most adults dedicate much of their lives to organizations, he further charged adult educators with the task of helping organizations develop "educative environments," characterized by a flexible structure, willingness to take risks, open and multidirectional communication, and readiness to depart from tradition (Knowles, p. 68). In fact, the environment that he asked adult educators to help organizations develop is strikingly similar to what is described elsewhere as a "creative workplace." Knowles argued that an organization must be innovative if it is to provide an environment conducive to learning:

> The evidence is mounting that man's ability to cope with a changing world is lagging farther and farther behind the changing world. The only hope now seems to be a crash program to retool the present generation of adults with the competencies required to function adequately in a condition of perpetual change. This is the deep need—the awe-some challenge—presented to the adult educator by modern society. (p. 36)

For Future Research. This study suggests that it might be possible to develop a diagnostic tool to determine whether a workgroup is operating at its full creative potential by measuring the relationship between worker satisfaction and the workers' perception of organizational support for creativity. Such an instrument could be an invaluable aid to management and adult educators

as they set about the task of making organizational environments supportive and responsive to the creativity that many workers long to express.

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Refereed Papers

ADULT DEVELOPMENT— AN INTEGRATIVE MODEL FOR PRACTICE

Trenton R. Ferro

ABSTRACT: An understanding of, and appreciation for, human development generally, and adult development in particular, is an important element in the adult educator's "tool kit." Such knowledge provides insight into the learners' attitudes, expectations of self and of the learning situation, and readiness to learn. Especially during the 1960s and 1970s considerable research was conducted to gain better insight into the developmental course of the adult lifespan. How can the adult educator and practitioner utilize the diverse findings of this research? The purpose of this paper and the subsequent presentation is to propose a model which integrates the findings of studies into adult development and propose uses and implications suggested by that model.

INTRODUCTION

An important area of research which has received considerable attention for more than two decades has been that dealing with the developmental process of the individual during the adult years. While this has been a welcome arena of investigation which has broadened both our understanding of lifelong human growth and our appreciation for the unique aspects, tasks, and struggles associated with the various periods of adulthood, this growing mass of information needs to be reduced to some useable format in order to be readily available and useful to the practitioner in adult, community, and continuing education. How can the large number of studies (e.g., Erikson; Buehler; Neugarten; Peck; Levinson; Gould; Lowenthal, Thurnher, & Chiraboga; Fiske & Chiraboga; Loevinger; Kohlberg; Perry; Gilligan; Fowler; among others) be organized in such a way that their accumulated writings and insights might be useful to the practicing adult/ continuing/ community educator?

IMPORTANCE

Thanks to the research of developmental scholars and others, persons who work with adults in educational and other human service settings have come to appreciate the variety and diversity of the adult years. No longer is the span of the adult period of life viewed merely as a plateau connecting the ascendency of childhood, adolescence, and youth and the decline of senescence—a plateau once thought to be devoid of much growth and change. However, we must now find

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ways to bring together these many individual studies with their diversity of detail. The sheer amount of information can become overwhelming and relegate these studies to academic bookshelfs and graduate courses on adult development and the adult learner. Practitioners will be able to utilize these various avenues of research as a reasonable base for making informed decisions affecting the actual conduct of their practice only after this mass of detailed information is reduced into a useable framework.

PROPOSED MODEL

Following the lead of such reporters and synthesizers as Chickering and associates (1985), Cross (1982), Lasker and Moore (1980), and Merriam (1984), the proposed integrative model divides the research of adult development into two categories: 1) age/phase and 2) stage. Table 1 presents descriptive lists which have been developed to outline, in parallel fashion, the major traits or characteristics of each of these categories. Age/phase theories are organized around the metaphors of seasons and life journeys and emphasize environmental influences on the process of adult development. Age serves as a guide for statistically significant groups of the population; generally speaking, a majority of adults enter each major phase at somewhat comparable ages. They tend to share similar sociological, cultural, and occupational tasks (see Chickering & Havighurst, 1981; Gould, 1978; and Levinson, 1978). These studies do exhibit some weaknesses, however: 1) they are restricted sexually, socio-economically, and culturally, and 2) most of them represent work that is now over 20 years old. They reflect neither significant demographic shifts which have occurred in the last twenty-five years nor increased investigation into the developmental patterns of women. They are useful, however, in highlighting the direction and types of developmental changes which do take place during the adult lifespan.

Stage theories, in contrast, emphasize epigenetic factors which are grounded in biological conceptions of development. Drawing upon Kitchener (1978), Lasker and Moore (1980) outline the major characteristics of stage theories:

> 1) Development is internally organized. That is, the emerging processes are guided by an intrinsic system of organization, such as the genetic code. . . .
>
> 2) Development proceeds through identifiable stages, and the stages represent discrete and relatively stable developmental plateaus.
>
> 3) The direction of development is toward increasing complexity of form and increasing differentiation of parts. . . .
>
> 4) At each identifiable stage of development, the organism displays emergent qualities that were not present at the previous stage. . . . Higher stages of psychological development enable persons to function in ways that cannot be anticipated at earlier stages. (p. 15)

Table 1
Comparison fo Phase and Stage Theories

AGE/PHASE THEORIES	STAGE THEORIES
METAPHOR = "SEASONS"	METAPHOR = "POOLS AND DAMS"
HORIZONTAL; CONTINUOUS; CURSIVE	VERTICAL; HIERARCHICAL; RE-SEQUENTIAL
GENERALLY AGE RELATED/ CHRONOLOGICAL	VARIOUS REACTIONS TO SAME CONDITIONS; NOT BOUNDED BY AGE
SOCIOLOGICAL CONDITIONS: PHYSICAL; SOCIAL; OCCUPATIONAL	PSYCHOLOGICAL STRUCTURE
AFFECTED BY ENVIRONMENT	INTERNAL/INTRINSIC DEVELOPMENT; EPIGENETIC
EMPHASIZES NURTURE	EMPHASIZES NATURE
SIMILAR EXPERIENCES AND DEVELOPMENT ACROSS COHORTS	DEVELOPMENT UNIQUE TO INDIVIDUAL, YET FITS PATTERN FOR SPECIES
UNIVERSAL	INDIVIDUALISTIC
GENERAL CORRESPONDENCE BETWEEN LIFE TASKS AND AGE PERIOD	DEVELOPMENT—>COMPLEXITY, DIFFERENTIATION

These theories attempt to describe, on a hierarchical basis or mode, the series of personality and cognitive stages through which adults *may* (but not necessarily *must*) pass as they mature. Each stage is, in effect, a psychological set which frames how each adult views the world and perceives oneself in relationship to that world. Unlike phase theories, which tend to be more universal, stage theories are much more individualistic. The function of chronological age is that age before which entering a particular stage is usually not possible; however, an adult need not enter a stage at a given age. In fact, stage theorists feel that most adults will never experience all stages. Furthermore, stage theory (again in contrast with phase theory) is more inclusive of all backgrounds.

Stage theorists have developed hierarchies containing six to nine stages which can, for the sake of convenience and the purposes of the model presented here, be grouped into three major categories or levels: egocentric, sociocentric, and allocentric (see Okun, 1984, p. 60). In the *egocentric* stages individuals make decisions based upon the perceived effect of a decision upon the self, e.g., "How can I avoid punishment?" or "What actions will cause others to like me?" Persons in the *sociocentric* stages make decisions based on established group norms, with their rationale for adherence to these norms ranging from a "law and order" perspective on the one hand to the perception, on the other, that the well-being of the greatest number of people depends upon the voluntary submission to accepted community standards. According to stage theorists, the large majority of adults operate at levels which are classified as sociocentric. Finally, a smaller number of adults can be described as *allocentric* in their stage development. These persons are able to subject themselves to what they perceive as the higher good, to universals. They consider these overarching principles so important that personal life and well-being are no longer significant. They are ready and willing to give themselves over to—even to sacrifice themselves for—these ultimate ideals (see Ferro, 1993).

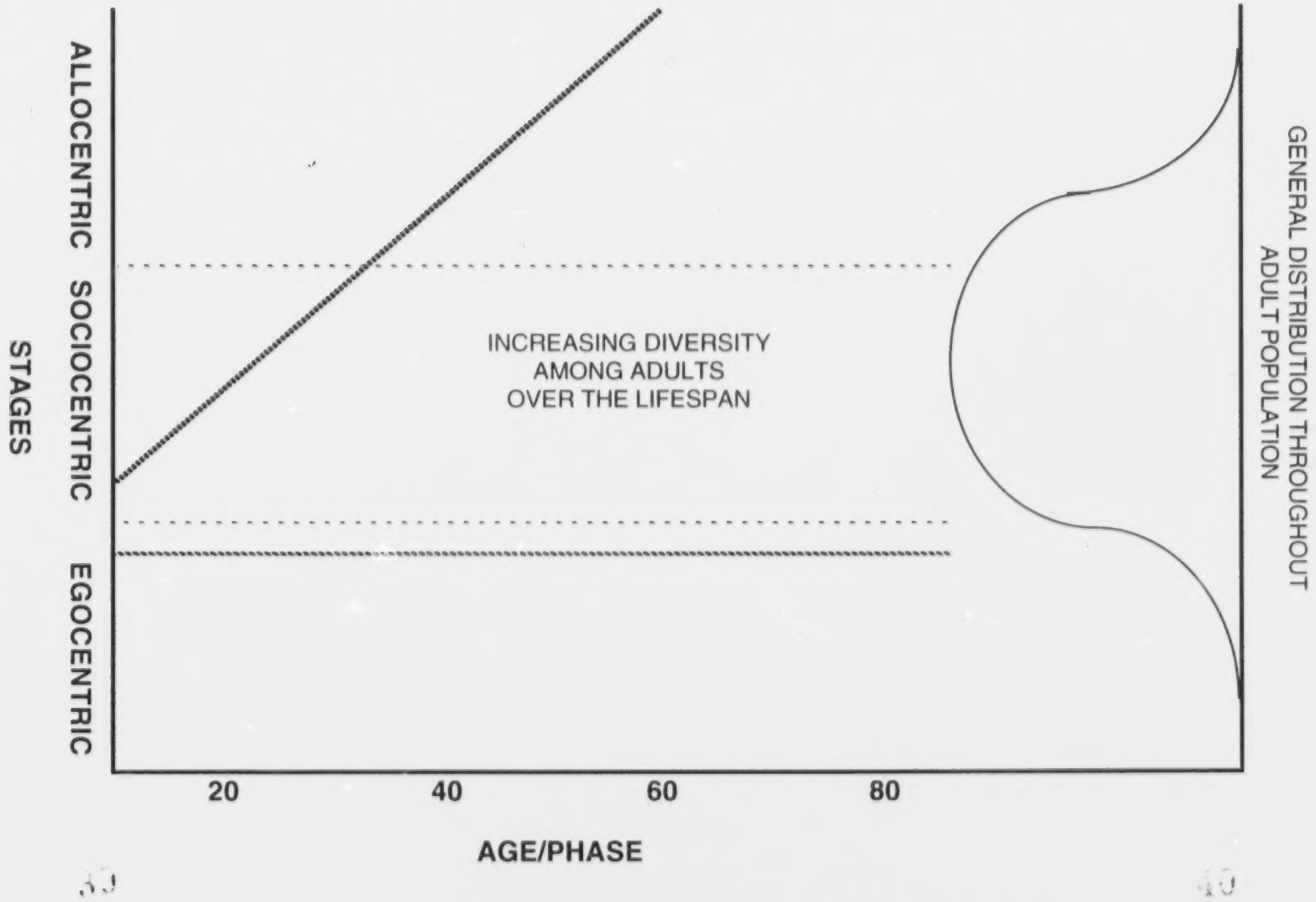
These summaries can be transferred to a two-dimensional model, presented in Figure 1, on which the age/phase theories (outlining life events through which most adults pass) compose the horizontal dimension and stage theories (distinguishing developmental levels which are not age related and at which adults may stop for all or a portion of their adult years) the vertical. The unique feature of this model is its attempt to bring both categories of studies (age/phase and stage) into a single framework. The visual impact of such an array highlights the increasing diversity that exists among adults as cohorts grow older. At the same time, it illustrates the conclusions of stage theorists that a majority of adults cluster within the sociocentric category, regardless of their age/phase development.

IMPLICATIONS AND APPLICATIONS

The driving force behind the development of this model has been the attempt to integrate a mass of research and theory into a useable model so that what has been learned from these efforts might actually be applied in practical settings. At the same time, the proposed model should raise questions leading to further research as well as provide implications for practice. In fact, insights gained and questions raised can lead to new levels of integrating research and practice by instigating areas of action research in which the actual practice setting now provides the arena for continued testing of the integrative model, the various theories which lie behind it, and new questions which might be raised by its study and use.

Both aspects of this presentation—the comparison and contrast lists and the two-dimensional model—can be surveyed for applications to practice as well as implications for further research. While such model building tends to hide the uniqueness and distinct characteristics of individual studies, it does convert and distill a mass of specific detail, which might otherwise prove of little use and value to the practicing educator, into a reasonable and useable format. Three implications for practice are given here as starters.

FIGURE 1
ADULT DEVELOPMENT MODEL



Possibly the most obvious conclusion which can be drawn from a brief perusal of the model is the growing differentiation among adults as they grow older. This observation has far-reaching implications for all agencies, organizations, and institutions which are designing programs to reach the adult population. Simplistic efforts do not suffice. For example, "singles groups" do not meet the needs of all singles at the same time (see Merriam & Ferro, 1986). Some are single because they have never married, some are divorced, and others are widowed. Chronological age, the presence or absence of dependent children, occupation, and cultural and socio-economic factors also must be considered. Programs for singles (who, if graphed on the model, would scatter throughout) must be more targeted in order to be most effective and beneficial.

Even more potent are the implications for working with the elderly. Many organizations and agencies make the mistake of attempting to attract all "golden agers" to the same group or program. A quick glance at the model demonstrates that, if stage theorists are correct, this is exactly where the greatest differentiation within the adult population exists; they range from egocentric to allocentric, from hypochondriacs to activists such as the Gray Panthers, from those wrapped up in their self-protective cocoons to those making decisions which affect the world. Both this diversity and the growing numbers of older adults in our population call for—in fact, require—tremendous expansion of programming with and for this cohort.

Another, and possibly less obvious, implication is the warning not to fall into the trap of developing programs geared only to specific chronological groups. Many interests and concerns are not limited to age categories. For example, a widow who is 25 may have more in common with a widow who is 55 than with an unmarried women her own age (Merriam & Ferro, 1986). Males in their middle years who have been laid off from factories and mines are returning to school to take up nursing. They now have more in common with colleagues 20 years their junior than they do with their former peers who spend the day in a tavern or hiring hall waiting for jobs which will never again be available.

These three illustrations should, hopefully, whet the appetite and encourage the reader to seek out other possible implications for application to practice and possible avenues for action research.

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1995 Pennsylvania Adult & Continuing Education Research Conference

Refereed Papers

EDUCATION AND TRAINING IN THE VIRTUAL OFFICE: CAN WE KEEP UP?

Irene C. Habermann

ABSTRACT: The purpose of this research is to find out how members of the virtual office environment receive professional training currently, what training is beneficial and what is desired. The participants of this study were volunteers from various companies across the United States, who work in a virtual office over 25% of the time.

The data shows that the majority of training is done through various self taught methods and on the participants own time and own initiative. The second most common training is provided through workshops developed and conducted outside of the company that are one or more days in length. The most interesting information received through this survey is the actual value of the training to the participants. This shows where and whether there is a need for training in this environment and the best way of conducting it. Insight on the various training methods mentioned and their effectiveness is also discussed.

INTRODUCTION

Over the past 10 years, mobile or virtual office has emerged as a successful option in the business world. Through the use of lap top computers, modems, fax machines and cellular phones the employee can work and communicate from anywhere. By the year 2000 over 50 million Americans will stay home to work (Bleeker, 1994). When the clean air act went into action, companies found a way to cut costs as well as pollution, by sending their employees home to work instead (Illingworth, 1994).

The literature discussing the virtual office focuses on the reasons and success of this new mobile management. The focus of the articles and reports limit themselves to who, what and how management operates and the advantages and disadvantages of such a corporate structure. Yet there is little research on how the employee of the virtual office is able to develop professionally. Researchers are beginning to understand the logistics of the home office structure, even though the information is limited. How are employees trained in such an environment? How do they keep updated in the latest technology? The purpose of this research was to find out how members of the virtual office environment currently receive professional training , what training is beneficial and what training is desired by the employees and their company.

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METHODOLOGY

The participants of this study were volunteers from various companies across the United States, who work in a virtual office over 25% of the time. Through contacts at these companies, as well as the use of the Internet and America On-Line , the researcher obtained approximately 50

volunteers to answer the questionnaire. The questionnaire addressed several issues, the first of which, were some demographics of the participant, such as age, sex, and schooling. The next items were on the logistics of their employment, i.e.. years with employer, years in a virtual office, etc. After which the questions addressed issues such as support structure and reasons for their virtual situation. The questions of how employers support the virtual office worker were reviewed. The last item of the questionnaire was a chart dealing with specific training in the virtual office. In this item the participant identified and evaluated the types of training experienced on the job. The three parts to this grid described each method, asked how often they participated in the method and of what value the training was to them and their particular employment. The participants were also asked to include any suggestions on the types of training methods they would benefit from.

FINDINGS

Participant Demographics

Of the 50 participants selected 32 responded. The age range of the respondents was 26 to 61 where 95% of the respondents were between the ages of 35 and 40. Of these, there were 12 female respondents and 20 males. All of the participants have post secondary schooling. The majority of the population have a bachelor's degree and the second most popular was a master's degree.

Employment Demographics

The 32 participants ranged in current employment years from 2 to 21 years. The mean is 9.219 years with the current employer where 95% are between 7.249 years and 11.188 years. Of these individuals, 16 participants are self employed. Half of the respondents working for themselves work in the virtual office for the duration of their self-employment. The mean years in a virtual office is 5.75. The shortest time in a virtual office is 1 year and the longest time is 14 years. 95% of the participants have participated in the virtual office between 4 and 7 years.

Of the 32 virtual office members surveyed, most work in an engineering capacity. The second most common title was managerial. 13 of the 32 cases are required to work out of a virtual office.

Employer Attitudes

Table 1 provides the rating of the 19 who were not required to work in the virtual office. The survey was done in a Likert scale with one being a strong reason, three being average and five being least. They rated their reasons for choosing to do so in the following order:

Table 1
Summary of responses for selecting to work in the Virtual Office

Reason	Mean	STD	SEM	Sum
Financial	1.813	1.991	.358	58
Family	1.406	1.617	.291	45
Corporate Structure	2.281	2.004	.360	73
Convenience	1.031	0.984	.177	33
Other	0.281	0.514	.092	09

The participants were then asked to rate the amount of support they receive from various sources. Table 2 shows how each source was rated, again in a Likert scale where one is high, three is average and 5 is no support.

Table 2
Ranking amount of support received

Area	Mean	STD	SEM	Sum
Corporate Training	3.219	1.763	.317	103
Co-workers	2.594	1.617	.291	083
Colleagues	2.688	1.402	.252	086
Management	3.250	1.561	.280	104
Family	2.500	1.414	.254	080
Friends	2.875	1.166	.209	092
Other	0.406	1.389	.249	013

Questions 10 and 11 dealt with the amount of contact each participant has with co-workers and supervisors. The Mean in the co-worker category was a meeting on a weekly basis where as meeting with a supervisor fell on a bi-monthly basis.

The next three areas dealt with Professional Development or training. On a monthly basis the average amount of training was a full day. The amount of training offered by the employer was on a monthly basis and the amount of participation of the employees was also monthly.

The last section of the survey looked at how training is currently accomplished, the frequency of participation and the value in each method. Table 3 looks at these issues.

Table 3
Mean on frequency and value of current training methods and number of responses given

METHOD	FREQUENCY	VALUE	NO.
Training workshop >1 day by company staff	bi-monthly	58.3%	11
Training workshop ≤1 day by company staff	quarterly	72.3%	10
Training workshop >1 day outside your company	annually	62.2%	10
Training workshop ≤1 day outside your company	annually	66.7%	16
on-line tutorial @ company	annually	43.7%	04
on-line tutorial @ virtual office	bi-monthly	60.8%	06
video-conferencing @ virtual office	annually	64.3%	03
tele-conferencing @ virtual office	bi-monthly	75.8%	06
own initiative and time @ virtual office	monthly	76.8%	24
self taught	bi-weekly	72.7%	26

This table shows the highest participation in the self taught category with 26 out of 32 participating and the least participation in the video-conferencing @ the virtual office, with 3 out of 32 participants.

IMPLICATIONS

The data shows the majority of training is done through the participants' self teaching. The second most common training is provided through their own initiative and time in the virtual

office. Workshops developed and conducted outside of the company and over 1 day were also frequently attended. So what does this mean for adult educators. Here is where we need to look at not just the frequency but the value in each of the methods. The most interesting information received through this survey is the actual value of the training to the participants. This shows where and whether there is a need for training in this environment and the best way of conducting it.

Training workshops showed of little use unless they were more than one day in length. Lack of time to absorb information and implement new information or techniques may be the cause of this low value rating. The idea of looking out not inward is also shown here. Where the value of out side personnel conducting workshops was rated only 58.3% on a bi-monthly basis versus 62.2% on an annual basis

The method currently used most frequently is self learning. Something we all strive for or is the industry failing to keep up with the demand of training via the latest technology. Use of the Internet and the World Wide Web are areas not even addressed in the adult education field. The implications of tele-conferencing and use of this in distance education is astounding.

Adult educators need to look to the various technology advances as opportunities. Opportunity for more creativity and the ability to reach a greater number of people. Though a virtual office worker is physically isolated, the communication can be much more extensive than face to face contact. As adult educators, the focus needs to be on how to reach these individuals and assist them in their professional development and personal growth. Insight on the various training methods not mentioned and their effectiveness also needs to be explored further. Technology is moving ahead at great speed and as educators we need to keep up. By educating ourselves we in turn are better prepared to educate others.

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1995 Pennsylvania Adult and Continuing Education Research Conference

Refereed Papers

SOCIAL CAPITAL AND EDUCATION: ARE SOME ADULTS DOOMED FOR LIFE?

Carole B. Karinshak

ABSTRACT: Social capital is the "currency" derived from an individual's familial background that often serves as a benchmark in particular social contexts. Specifically, in some instances, the socio-economic status of a student is used to segregate students in groups according to their perceived intellectual ability instead of referring to standardized test results, or the like, that realistically measures a student's ability. The author argues that this "treatment" of children from lower socio-economic backgrounds, transcends into adulthood. Thus, affecting the learning experiences of adults.

INTRODUCTION

Coleman's introduction of the concept of social capital enables educators to view the educational institution in a different light. Critically viewing the relationship between the social capital of students and their perceived human capital in the classroom allow us to examine the influence that lifelong education has on the lives of adult students. We must not equate socio-economic status with intellectual ability. This comparison is obviously dangerous and unfair to the students. Only when the educational system and its teachers acknowledge the individual capabilities and talents of each student will we truly reach an egalitarian educational system.

Educational institutions reflect our society in many respects. These institutions are designed and managed by members of our society. How, then does social capital influence the quality, or lack of the education of children? How do these educational experiences of children affect adult learners? This paper will examine the characteristics of social capital, the assumptions that may be evident with respect to social capital, the immediate social phenomena that may influence educational outcomes, and the effect that this phenomenon has on the educational outcomes of adults in our society. It is essential to point out here that the social capital of children in educational settings establish a fundamental basis for future relationships in institutional settings, not only in educational ones but also in the workplace. As a result, it is crucial to remain cognizant of these effects as an adult educator. I would argue that the perceived social capital of children by teachers and school administrators plays an important role in the educational experiences and outcomes of adult students. To begin this discussion of social capital and its influence on education perhaps it would be useful to understand its meanings.

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SOCIAL CAPITAL DEFINED

Coleman (1988) introduced the notion of social capital that he considers one of the three components of the concept "family background." The other two components being financial capital and human capital. He points out that the relationship between human capital and social capital may influence the educational outcomes of children. Coleman (1988) defines social capital as "the relationship between children and parents (and when families include other members, relationships with them as well)" (p. S110). It is important to note here that it is difficult to totally isolate human interactions in any particular social context. However, for the purposes of this paper, the notion of social capital is discussed as a single entity in conjunction with the surrounding social interactions that impact on the educational attainment, or lack of, by children. Social capital provides the underlying attitudes that influence educational outcomes. For example, a former literacy student had a poor relationship with her mother as a child. As a result, her mother did not encourage her to do well in school nor did she provide any support for her daughter through her own social contacts to facilitate a successful learning experience in school. My former student, a mother of three children, is still struggling to read.

Social capital is a specific entity that is influenced by other social relationships. Human capital evolves from social capital. Coleman (1988) states that "human capital is created by changes in persons that bring about skills and capabilities that make them act in new ways" (p. S100). For the sake of comparison, let's look again at the scenario of my former literacy student. Her sister had an entirely different educational experience, as she attained the education and professional credentials to become a nurse. Her sister apparently benefited by the social capital given to her by her mother. The social capital shared by mother and daughter joins with the mother's human capital to support her educational experiences as a child and has transcended into adulthood. It is important to point out here that the financial capital for each daughter was essentially equal for all intensive purposes.

I use this true example to emphasize that low economic status is not solely the culprit contributing to substandard (minimal proficient literacy skills to function in one's culture) educational attainment. This illustration also reflects the life outcomes of each woman, one pursued a career, the other is still struggling to assist her son with his spelling words. Both women, as children, could have received similar social capital from their mother, but did not. Obviously, there are other factors that contribute to educational success, such as individual abilities, motivation, and various teacher and institutional elements. Nevertheless, the familial support experienced by children serve as the foundation to build future educational experiences. This culmination of educational experiences affects the educational culture of each individual. This educational culture is composed of the beliefs, values, and norms that are acquired by exposure to the social and human capital of an individual's parents and by their life experience.

As previously mentioned, financial capital and human capital are considered, by Coleman (1988), two of the components of an individual's "family background." Kozol (1986) points out

the inequities pervasive in school districts resulting from the variation of Moines available from poor families versus the more affluent ones. An elaboration on this point is not included in this discussion. The author believes that the educational inequities experienced by children run much deeper that just the financial considerations Kozol mentions. Obviously, money does not provide the answers to all educational dilemmas. The distinctive social relationships that are inherent in the teaching-learning environment also contribute to the positive learning experiences. However, these social relations between the teacher and the students are deeply embedded in the relationships that originate in the homes of the children. Exploring the relationship between social capital and human capital will offer a critical perspective of the familial influences that impel successful learning experiences

It is vital to note that social capital is contextual. That is, personal associations in one particular setting, i.e., community, school, may not be useful in another setting, such as on the job. Therefore, individuals must discern the most effective use of social capital within each of these settings to optimize the effectiveness. Coleman (1988) points out that it is possible that the social capital in one situation may be harmful in another. This brings us to another facet of social capital. How does an individual acquire and ascertain human capital to function effectively in each of the social settings that is a part of his/her life? Is it possible that the "game," or utilization of social and human capital, may be totally different in each of these settings?

It is also important to understand the notion cultural capital as these two concepts, social and human capital, are intricately interwoven within an individual's life and in their micro-society; and to a certain degree in the macro-society. Cultural capital is considered the beliefs, values, and norms that are held by a particular group of people that may be used as "currency" in social interactions with others. Bourdieu (1977) points out that children of wealthy families are more likely to attain high levels of cultural capital, and this cultural capital may carry over into their adult life and show up in the forms of prestige within their social circles and powerful, high-paying jobs. Cultural capital may be viewed as currency to be spent, as is true for social and human capital, as an individual progresses through life. Economic currency may become exhausted if not managed properly. On the other hand, cultural currency may not become exhausted unless the individual performs a social blunder that totally diminishes his/her cultural currency to a much lower level. This is influenced by power that is either exercised by the cultural constraints or perhaps from an institutional one. The notion of power may also play a role in the attainment of human capital of an individual. Specifically, use of the contacts of an individual may be used for social gain or withheld, depending on the individual's discretion. This may show up as an attempt to patronize an individual's constituent or restrain him/her.

These concepts of social, human, and cultural capital are blatantly obvious in an individual's social circles. It is evident, from the nature of these three concepts, that their impact may be seen in the institutional interactions of an individual, such as the workplace and school. However, the impact of social, human, and cultural capital may be less obvious, causing more subtle differences that greatly influence the institutional outcomes. The discussion now turns to explore the sociology of education.

SOCIOLOGY AND EDUCATION

The primary purpose of education is to prepare students to effectively function in their lives and in society at large. This notion may be viewed from several perspectives: the institutional considerations, familial participation, and the participation of the student. As previously mentioned, there are other facets that must be considered, one is that of power. It has been said that knowledge is power. This should be deliberated from both the institutional stance and that of the student. Specifically, the institution has the power to decide what information and knowledge that will be available for elementary and secondary students and which students will be receiving this information. This control over knowledge has a lasting impact on the students themselves. As the institution may determine "who gets what," particular students may become more privileged than others. Mehan (1991) points out that "the distribution of students to high-, middle-, and low ability groups seems to be related to their parents' income and occupation" (p. 4). Often parents from lower socio-economic status are unable to provide the educational support needed by their child (children). In many instances, this is due to the fact that they also had poor experiences in school or that their time is spent obtaining financial resources for the family. If this is the case, what happens to the capable and competent students from lower-income families? Is knowledge equated with income? The unfortunate reality is that, in many instances, this inequity continues through their lives, showing up as lower paying jobs and a lower social status.

The notion of reproduction affects the social constructs of education. The use of a particular text or subject is determined by the contribution it makes to uphold the ideology of that particular institution. The cliché, "if it's not broken, don't fix it" often provides the rationale for some materials. Also, some educators are attempting to produce "clones" of themselves. This notion of replication is essential to maintain the "status quo" of education itself. Of course, there must be someone who can "carry on" as their successor, upon retirement. Without this process, the system may collapse and evolve into an institution that is undesirable. In order to maintain and preserve the institution's standards, reproduction is critical. Deeply embedded in this notion of reproduction is the institutional culture that integrates the student's social, human, and cultural capital. However, it is important to note that the student's social, human, and cultural capital are compared to the standards set by the institution. With this in mind, is it possible that the social, human, and cultural capital of the students may be viewed differently in the educational environment than in their respective social circles?

School plays a crucial role in our society and yet, the institution focuses on this notion of replication of existing norms and fail to recognize their relationship with society at large. Giroux (1988) captures this notion succinctly:

> By refusing to acknowledge the relations between culture and power, the dominant educational discourses fail to understand how schools themselves are implicated in reproducing oppressive ideologies and social practices. Rather, they assume that schools can analyze problems faced but different cultural groups and out of such analyses students

> will develop a sense of understanding and mutual respect that will in some way influence the wider society. But schools do more that influence society; they are shaped by it. (p. 130)

This situation exists as the schools are preparing students to survive, compete, and exist in our macro-society. And yet, educators are preoccupied with maintaining their current ideology and they often fail to recognize that alternative ways of "knowing and doing" are just as acceptable as traditional ones.

The discussion now turns to the effects of social capital on the educational environment. Specifically, the students are greatly affected by the interaction of familial social capital and the interpretation of this social capital in the educational setting.

SOCIAL CAPITAL AND THE STUDENTS

It is ironic that the students are sometimes the victims of the system that was created and operates for their benefit. Students are products of their immediate community and family structures. These micro-cultures, or sub-cultures form the basis for the norms, values, and beliefs that become somewhat inherent in their lives. There are many facets of these sub-cultures that affect the students and their treatment, primarily economic, and social status. In many instances, the human capital and economic status of a student serves as a criteria for scholastic abilities. This notion typically takes form as some sort of tracking, or method to segregate the students in groups according to their intellectual abilities. An excellent example of this is reflected in Willis' (1977) work with working-class lads in England. Essentially, the boys were conditioned by their sub-culture to accept the life of the working-class. As a result, the boys, even at an early age, personified the habits of their parents, i.e., drinking, smoking, sex. A noteworthy observation is that the parents of these boys condoned their behavior. In addition, the behavior of the boys was accepted in their community. Their behavior was a problem in the school environment as it did not subscribe the values deemed acceptable by the institutional culture. Accepting their destiny as a working-class individual, the boys did not value school and viewed it in a somewhat perfunctory manner.

This example of working-class lads and their view of school serves as the impetus for educators to reflect on the ideology of the institutional system with respect to reproducing human capital. Is the educational system providing an egalitarian education for all students, as professed by the democratic doctrine? Or, has the institution just "given up" on the students and decided to reproduce what occurs outside their walls? Admittedly, each student deserves an equitable education, and this equitable education may show up in many forms, depending on the abilities of the student. However, are our educational institutions failing to encourage each student to perform at their optimal level?

Another example of student treatment in our schools is reflected by the current literacy situation in this country. The author has conversed with numerous adults regarding their secondary school

experience. Essentially, they were from poor and lower-class backgrounds, and the value of education was not stressed in the home (Karinshak, 1994). It was difficult for these individuals to assimilate into the school culture and as a result, they exhibited poor study habits. These students were passed over by their teachers and just promoted from year to year. Some of these adults graduated from high school unable to perform basic reading and writing tasks. As adults, their lack of educational adeptness greatly affected their lives: their families, their jobs, and most importantly, their self-esteem. These adults are bitter when reflecting on their school experiences and rightly so. I would argue that these adults were cheated by our supposedly democratic educational system. The sad fact is that their impoverished educational experience has doomed them for life. As adults, these individuals do not embrace educational experiences with enthusiasm, even though they know that they could benefit from many adult programs. They view adult education programs as a continuation of their elementary and secondary education experience and are concerned that they are only being setup for failure again.

There are also "success" stories of students that overcame the institutional oppression based on their social and economic status. An African-American colleague shared the story of his father and his fight to overcome educational stratification in the school system. This gentleman was assigned to lower-level classes because of his poor, working-class background. The father, as a high-school student, voiced his concern regarding the assigned classes and the fact that he was bored with the lower-level material. He acquired the support of a few of his teachers, who realized that he was not being challenged as a student. After lengthy discussions with the school administrators, and teachers he was re-assigned to higher level classes and graduated from high school with honors. This scenario is the exception and not the norm. However, this story greatly concerns me. Why must a capable student contest the educational system to receive an equitable education?

CONCLUSION

Understanding social and human capital and their relationship to education may be useful to adult educators. The examples presented here provide a mere sampling of the inequitable treatment of children's educational opportunities and the results of this treatment as these students are now adults. Adler (1988) has advocated school reform for over forty years and yet we, as an educated society, are still turning out students that are ill-prepared to live full lives as adults in our society. The irony of this situation is that we, as educators, have reached high levels of educational achievement and seem to have great difficulty in designing and offering an egalitarian education to all students. Are we trying to mis-use our power as intellectuals to also "clone" ourselves so that our perceived power will not be undermined by those who do not share our same educational paradigms?

One of the most pressing challenges of educators is that of incorporating cultural diversity into the school systems. Social capital, human capital, and cultural capital are some of the facets of cultural diversity that must be addressed. The integration of the individual social and human capital and the culture of the educational institution has a profound effect on the educational

outcomes and attainment of the students. We have long surpassed the ideology that students must receive an education that equates with the status quo of the bourgeoisie. Admittedly, all students do not wish to go to college and achieve upper-level academic credentials. However, a cognizance of the individual abilities of each student is vital for the educational welfare of each individual, the institution, and society at large.

Some secondary schools revise their curricula to include courses, such as cake decorating, and weight training and physical conditioning, that contribute little to the intellectual growth and development of the students. Most colleges do not require courses of this nature for admittance, nor do vocational schools. Certainly, I am not negating the fact that secondary school students may find such courses enjoyable and enlightening. However, I argue that these types of courses do not prepare students for the adult world, that may include college and/or vocational training and the workplace.

The panacea for the educational dilemma of social capital and education lies in the cognizance of the multiple social relationships that affect the students and the teaching-learning environment. I would staunchly advocate that students be required to take classes that include topics on social relationships, cultural diversity, and organizational culture, so that they may understand their micro-culture and perhaps themselves. These courses would contribute to the acquisition of real-world knowledge that may be useful for them to realize their fullest potential as a human being. In matters such as education, I generally take the position of the postmodern paradigm that emphasizes that there are no absolutes. Although I profess to being a student of this paradigm, a novice at best, I believe that the postmodern paradigm aids us in understanding some of the pervasive problems in our society. We have reached an era in which the attainment of middle-class ideologies no longer meet the needs of all individuals, nor our society. Perhaps this notion is one of an idealist and may be viewed as an educational utopia. However, it is certainly a goal to strive for. The educational institution and micro- and macro-societies, of which we are all a part of, are evidently cyclical. One influences the other and vice versa. Obviously, there are many peripheral components that also impact on any social relationship. Conceivably, a deeper understanding of both may enable educators to become more effective in preparing students, children and adults, to live more fulfilling lives as adults.

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1995 Pennsylvania Adult & Continuing Education Research Conference

Refereed Papers

PLANNING FOR CHANGE; TRANSFORMATIONAL LEARNING AND ITS IMPLICATIONS FOR ADULT EDUCATION PROGRAM DEVELOPMENT

Kathleen P. King

Abstract: Mezirow's theory of transformational learning offers adult educators a comprehensive theory of adult learning. This paper demonstrates that while the transformative concepts familiar to adult education are being integrated into educational practice, and the theory has begun to be purposefully applied to the learning experience, its application to program development has only been marginally discussed or defined. A modified planning model provides a framework from which to view the implications of transformative learning on program development. We need dialogue, literary and action research that will focus on these issues of transformational learning in order to provide a growing reservoir of alternatives for current and future programs.

INTRODUCTION

Jack Mezirow's theory of transformational learning is an extensive theory-based conceptualization of adult learning; a grounding truth in this theory is the empowerment of the individual through change. Ultimately this offers adult educators a comprehensive theory of adult learning (Mezirow, 1975, 1994). Recently, Cranton (1994) has become an articulate voice of both perspective transformative theory and its application to adult education. Mezirow's theory of learning involves the critical examination of the paradigms of the adult's world. As this occurs, the individual considers new perspectives and assesses assumptions that may have been previously unchallenged. During this process, the frame of reference, the filter, through which experiences are interpreted changes. Finally, action has to be taken on these realizations and insights (Mezirow, 1991).

Cranton (1994) provides us with an excellent discussion and analysis of how transformative learning occurs, how it varies and how it empowers adults engaged in it.
One theme that emerges is that perspective transformation is often linked to life transitions (Brammer, 1992; Daloz, 1987). Sometimes the transformations predicate the transitions, but outside the educational setting the transitions seem to precede perspective transformations. Indeed many adults enter educational pursuits as a consequence of life transitions and their burgeoning need to cope with change and uncertainty; they are effectively primed with an openness toward the critical evaluation of their worldviews and assumptions.

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Finally, it is important to realize the breadth of application of this theory. Perspective transformation could be a crucial means for the post-modern person to adapt authentically and function

in their rapidly changing society. There are also three different types of "meaning perspectives" that may be influenced: epistemic, sociolinguistic and psychological. Moreover, both Cranton (1994) and Mezirow and Associates (1990) provide examples of transformational learning occurring in a wide variety of disciplines and contexts.

A MODEL OF PROGRAM DEVELOPMENT

In order to discuss the implications of transformational learning on program development it is beneficial to identify a development model that will serve as a guide for the discussion. A non-linear, integrated planning cycle (Kowalski, 1988) may offer the flexibility and accountability that would enhance program development for transformational learning. Cervero and Wilson (1994) address program development as a social activity in which adult educators have to negotiate power and interpersonal and institutional interests. Their model recognizes the social, political and organizational context of program planning. Both of these major emphases are included in the proposed model.

Kowalski's model (1988) is a continuous systems approach to program development. As the planning process proceeds, various steps are followed and interwoven with continuous evaluation: an advisory council formed; the organizational philosophy and mission reviewed; a program mission defined; a needs assessment designed and implemented; objectives defined; curriculum forged; resources and budget accounted for; and the program is marketed and executed. The results of the evaluation are then analyzed and applied to modify the next application of the program.

This model is only a skeleton from which to start. The particular needs, variables and implications of a program may be used by the program developers to design a model that is program specific. Each step of the planning process needs to be contextualized for the program under consideration. With this integrated model as a frame of reference, we can begin to discuss how transformative learning in general will affect program development.

FUTURE RESEARCH: PLANNING FOR CHANGE

Freire's emphasis on the social change available through transformational learning has been widely replicated. Such programs are carefully planned to develop change agents that will act to transform society (Shor, 1987). However, perspective transformation on an individual basis is different, and needs to be addressed as such.

In the past, it has been observed that a broader application of adult educational theory to program development was needed. Today, we face this challenge with transformative learning. Its potentially life-changing nature underscores the fact that to develop timely, relevant, and

successful programs for the adult learner, we need to plan for change. The remainder of this paper, highlights some of the issues that adult educators face as they develop programs in view of transformational learning theory.

ENVIRONMENT

As transformative programs are planned, environment needs must be addressed through restrictions, contextual concerns, resources and curriculum; the environment proves instrumental to the learner's success. For example, too supportive an environment stunts the highly personal process, while too little support leaves the adult learner without opportunities to pursue or complete the process (Cranton, 1994; Daloz, 1987).

The environmental settings are two-fold: 1) the environment in which the learner needs to exist daily, and 2) the learning environment. The instructional requirements need to be intermeshed with the participant's outside demands for their attention, context of meanings, and constructions of reality (Brubacher, 1993). In addition, there are stark differences in the transformative experience based on the learning environment (Mezirow & Associates, 1990).

Daloz's (1987) thesis is that mentoring can play an important role in guiding someone through the transformative process. In contrast, Brookfield (1986) emphasizes appropriately facilitated discussion groups. Safety, respect, trust, and codes of conduct are important factors he delineates for this medium of perspective transformation. Together, these may be the support and learning environments that will encourage perspective transformation.

Daloz (1987) states that adult learners benefit from greater structure when they first reenter education. Should the role of the mentor begin then, and does it evolve over time? In some cases the facilitated discussion group may be a better support group. If so, are they to be formal support groups, ad hoc or part of the curriculum? The literature on collaborative learning can help transformative learning program developers with many of the issues particular to its implementation (see Brookfield, 1986). These are concerns that should go beyond their traditional place in classroom planning to the broader realm of program development.

It is a twisted commentary that the very programs that often result in life changing perspective transformations -- adult basic education, adult continuing education, and graduate education - often do not have adequate support networks. The complex lives of adult learners make it difficult for them to access the traditional support systems. Adult learners often have erratic and overloaded schedules, visit campus once a week, and have little student or no faculty contact outside the classroom. Student Services in higher education has built a significant support culture for the younger, usually, resident student. Educational institutions need to discover and plan for the support needed to navigate successfully the course of perspective transformation.

Finally, the most fundamental environmental factors of physical, social and psychological comfort, appropriate facilities, and attractive, convenient locations need to be addressed and

satisfied in the program development process (Mezirow & Associates, 1990). Perspective transformation is an intensely personal and, at times, difficult process. How many discussions are disrupted or prematurely terminated because of interruptions or the unavailability of resources? Appropriate planning can circumvent such problems.

RESPONSIBILITY FOR OUTCOMES - COPING SKILLS

Brookfield (1986) states, "... Significant personal learning might be defined as that learning in which adults come to reflect on their self-images, change their self-concepts, question their previously uncritically internalized norms, and reinterpret their current and past behaviors from a new perspective" (p.213). This describes the perspective transformation that is foundational to adult education. If adult education programs are going to produce such profound changes, responsibility needs to be taken for their consequences.

As such programs are planned, the curriculum and goals of the transformative experiences should include an exposure to and acquisition of coping skills (Brookfield 1986). Coping skills empower the transformative learner. Brammer (1992) offers insight into many appropriate coping strategies as he describes the marked relationship between life transitions and transformational learning. We need to consider how to successfully employ methods such as small groups, case studies, role playing and assignments requiring reflective insight; these may serve as building blocks for coping skills (Cranton, 1994). Other concerns may include a program specific definition of coping skills (Brammer, 1992), the expertise of the educators, class sizes, sites, periods and frequency of meetings.

Ethical considerations also have a place in program development (Cervero & Wilson, 1994). Where are the boundaries between the program's and learner's responsibility? A significant perspective transformation is life changing by definition - whether it is positive or negative may depend on the program. These questions may be best fielded by an advisory council. It is, however, critical that they be discussed at length and the results be incorporated in the program design.

ADVISORY COUNCIL

Transformational learning entails many contextual variables. The advisory council should include potential learners (Brookfield, 1986), because participants in the program may offer a different perspective in these areas than educators and other professionals. In addition to learners, the advisory council should include other stakeholders, alumni, educators, counselors, and professionals appropriate to the program's area of study to guide the program's development.

This council should be consulted in all phases of the development process: from reviewing the organizational mission, and defining the program mission, through deciding evaluative procedures. However, the literature is devoid of references to the use of advisory councils in program

development for transformational learning programs. We need to begin to investigate the best ways to employ this aspect of program development to enhance transformative learning.

PREPARATION OF EDUCATORS

Perspective transformation is a complex and precarious process that needs to be carefully guided. How well are the educators prepared to deal with the potential crises, questions and hardships of their students? What disciplines may they draw assistance from? How will they demonstrate their competence? How much experience in counseling should be required or expected? Answers to these questions are crucial in such a program's development; the planners need to insure that the educators are sufficiently equipped to carry out the program purposes.

NEEDS ASSESSMENT

The traditional needs assessment methods of adult and higher education may not be the best choice for perspective transformational learning. Freire's work determines themes of study in a thematic research stage and only as group discussion unfolds are timely needs revealed (Cranton, 1994; Shor, 1987). This is easily transposed to the individualistic emphasis of Mezirow's theory, because specific needs and outcomes are in some respects unknown when a participant enters the transformative learning experience. These needs are often discovered during the learning process. The contextual emphasis of transformative learning may be seen as paralleling needs assessment in program development.

CONTEXTUAL CONCERNS

As adult education programs are developed, they need to be tailored to the context of the learner and their future application of the learning experience. It is not possible to describe specific methods of enhancing critical reflection and perspective transformation that will be universally applicable. However, an example of integrating program development and transformational learning may be evidenced when theories-in-use are an important means for critical thinking in the workplace (Schön, 1991). The juxtaposition of the learner's theory and practice needs to be planned for and encouraged much more so in transformative learning than in conventional learning.

EVALUATION CYCLES

A cyclical model of program development uses evaluation for a program's continuous improvement. Specific goals of the program, a method of evaluation, the evaluators, the participants and the values that are incumbent to the program all need to be discussed and agreed upon by the program designers and the stakeholders (Kowalski, 1988). Perspective transformation offers some particular difficulties in this area. Deciding on the predominate or operative values is a paramount task in itself. However, in this case it will also be difficult to determine how to evaluate outcomes because they involve changes in thinking, frames of reference and personal growth

rather than more directly measurable knowledge facts. Qualitative research methods would probably be the appropriate choice as such programs are evaluated.

Evaluation issues that need to be considered will include: Who will be the evaluators? What are the specific goals? Who are the stakeholders for the particular program? Are only summative evaluations possible, or also formative evaluation? Who is best capable of analyzing and presenting the results, and how will they be used to modify the program in process and afterwards? Some of the answers to these questions will be specific to transformative learning because of its distinctive qualities.

CONCLUSION

Perspective transformation is ultimately an intensely personal experience. Current research is showing that it is a foundational component of adult development and adult learning (Cranton, 1994; Mezirow & Associates, 1990; Taylor, 1995). It dynamically describes the process of adult growth. And while educational institutions and adult educators cannot create or force transformative learning, they need to plan for it. This planning needs a pluralistic emphasis on human needs, the process of transformative learning and its outcomes. Transformational learning demands creative programming in order to continue to mature in practice.

Adult education programs that seek transformative change need to consider the impact of issues such as the learning environment, responsibility for outcomes, advisory councils, the preparation of educators, contextual concerns and planning cycles. We need dialogue, literary and action research that will focus on these issues of transformational learning in order to provide a growing reservoir of alternatives for current and future programs. At this time extensive research is imperative. This research may take the form of evaluating current programs that engage in transformative learning. It should also include research on planning for transformative programs in both varied settings and with a multiplicity of approaches. Since transformational learning is a fundamental outcome of adult education, it needs to be prepared for from the beginning.

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1995 Pennsylvania Adult & Continuing Education Research Conference

Refereed Papers

THE GOODWILL LITERACY INITIATIVE EVALUATED AS A PILOT PROJECT INTEGRATING *JTPA* POLICIES

Christine Mollick

ABSTRACT: Nonparticipation in adult education programs is a concern for many service agencies. This study seeks to determine the factors that significantly enhance students' chances for successful program completion. Individual characteristics and program components are examined to test several hypotheses. Sociological theories provide a framework for the analysis of the impact of demographic traits such as race and income on success. Adult learning theory models suggest that age might be important. Finally, program evaluation research shows that changes made in service delivery such as career counseling, vocational based instruction, and case management might be more important than personal characteristics and should be investigated. The findings of this study suggest that clients' chances for completion of adult education programs cannot be predicted by race or income, but that students who are between 25 and 44 are significantly more successful than other age groups. Overall, case management proves to be the most important factor involved in a student's success. The positive effect of case management on clients' success remains when the type of instruction (traditional or vocational based) is controlled for.

INTRODUCTION

Goodwill Industries of Pittsburgh, a community based organization, is incorporating vocational based instruction and case management into its existing adult literacy/education program with the intention of reducing nonparticipation. The adult education program undergoing these policy changes is the Goodwill Literacy Initiative (GLI). GLI is a service agency that receives referrals from government funded, community-based educational organizations and the Job Training Partnership Act (JTPA). Adult clients are referred to GLI because they do not possess the literacy and education levels required by the Service Delivery Areas (SDAs) to receive funding for job-training programs. The role of GLI is to help referrals increase literacy and educational levels to the 12th grade 9th month level — the eligibility requirements for many funded job-training programs. The entire process for clients to apply to an SDA, be referred to GLI, achieve adequate literacy and education levels, and reapply to the SDA for training is very time consuming.

Realizing that a better program structure was needed to improve client services, Judith Aronson, Director of Education and Training Programs, and other GLI administrators incorporated JTPA components into the current ABE program design. By implementing vocation based education and case management, program administrators speculated that more students will be retained and educational services will be delivered to clients more effectively.

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RELATED RESEARCH/CONCEPTUAL FRAMEWORK

Huey-tsyh Chen (1990) identifies two specific models involved in the development of a program theory: descriptive and prescriptive. Descriptive theories attempt to analyze and explain events as they actually are. As such, descriptive theories are objective in their approach to program evaluation. Prescriptive theories suggest how things should be done and how to better serve program clients. This approach is subjective and based on value judgments. An integration of both descriptive and prescriptive theories benefits this research. Based on the integrated program model, sociological theories are used to explain the rationale and implementation of program policies. Adult learning models address individual achievements, while the added structural elements of the GLI program are evaluated using program evaluation theories.

The culture of poverty model establishes middle class culture as the norm and other cultures are judged against its characteristics (Fingeret 1988, p. 16). In a study to challenge the culture of poverty model to explain why blacks and hispanics do not achieve their goals, Daniel G. Solorzano (1991) controlled for socio-economic status (SES). Solorzano's research found: 1) educational and career goals and SES have a positive relationship, 2) blacks and hispanics have higher expectations than whites in all but the highest socio-economic quartile when controlling for SES, and 3) a significant difference between the aspirations of all three groups and their actual achievements (p. 184). Although the culture of poverty model would predict that blacks and hispanics have lower aspirations and expectations because of their lower SES, Solorzano's study proved that was not the case.

Adult education researchers agree that technological, economic, and societal changes influence adult education programs. Susan Imel (1988) says that program administrators must design programs to better educate their clients for the changing work force. An adult education program of great interest to Imel is workplace literacy. This type of adult program enables clients to update their skills for their current job (p. 1). However, adult programs cannot teach only literacy. She sees a need for adult education programs to focus on both traditional education and vocational literacy.

In another study, Susan Imel and Juliet Miller (1986) address the issues of technology, the combination of basic education and vocational literacy, and the dropout rates of adult programs. Both agree that technology greatly affects the work force. As technology becomes more advanced, employers seek higher educated employees. Thus, technology increases the "levels of literacy for both entry-level jobs and job advancement" (p. 15). Miller and Imel believe the combination approach provides several advantages for adult education programs: 1) opportunities for applying basic skills and concept increase, 2) clients learn to use their basic skills to solve vocational-oriented problems, and 3) the vocation based instruction keeps clients interested — thus supporting achievement and encouraging retention. The last issue addressed by the authors is dropout rates. Miller and Imel cite one problem with research designed to examine retention. Research shows that clients will give "socially acceptable reasons (need to work), rather than real causes (isolation and boredom)" (p. 7). The authors argue that vocational education plays a significant role in retaining clients. Also, Miller and Imel find that those who

have received vocational education are more likely to complete the occupational program they selected.

Michael Miller (1993) designed a study to identify factors that have caused adult programs to fail. Of the 51 adult programs involved in the study, 39 were canceled for logistic reasons, six were learner-initiated, three were educator-initiated, and the last three were administrator-initiated cancellations. Regardless of the reasons for cancellations, Miller concludes that most programs failed because the "adult learner was not taken into consideration when designing program objectives and methods" (p. 5).

In addition to the argument that most adult education programs fail because the clients are not taken in consideration when designing programs, the literature supports the integration of basic education and vocation based instruction. The studies of Susan Imel, Juliet Miller and Imel, and Michael Miller urge program administrators and policy makers to design adequate educational opportunities for the clients they serve.

RESEARCH METHOD AND DATA BASE

This research was explanatory and tested the hypothesis that structural variables such as vocational based instruction and case management were more important to successful completion of the program than individual characteristics such as race, sex, age, and income. New 1994-95 data collection procedures recorded student retention and progress after each of three 12-week terms. The Goodwill Industries database contained client records for every individual referred to GLI from 7/1/94 through 3/10/95. Because of time restrictions, only data from the first two academic semesters were used in this research..

Approximately 489 clients entered the GLI program. Of this total, 333 cases received testing and/ or other services outside Goodwill Industries. These cases from the outside agencies were not part of the "in-house" population studied and were omitted from the analyses. The remaining 156 received a JTPA orientation, career counseling, case management, and the opportunity of vocational based instruction from Goodwill Industries. Of this 156, 9 cases were omitted. Two cases were entered twice, and the other seven (7) were missing information pertinent to the study. As a result, the number of cases used for analysis was 147 (N=147).

Cross tabulation tables and the chi-square test of significance were used to describe and analyze the effects of race, income, and age on student success. Similarly, student retention from the 1993-94 program years was compared with the first two semesters of 1994-95 to determine the impact of formal case management.

FINDINGS

This study found that clients' chances for completion of adult education programs could not be predicted by race or income. Table 1 shows the analyses done for race. No statistical significance ($p > .05$) between dropout rates of non-white and white GLI clients was observed. The income analysis (Table 2) shows no statistical significance for dropout rates among the income groups

occurred. These findings contradict predictions based on the culture of poverty model. However, the findings coincide with the research done by Daniel G. Solorzano (1991).

Table 1
Dropout and Completion Rates by Race

RACE	First Semester N=101 p>.05		Second Semester N=87 p>.05	
	% Non-white	% White	% Non-white	% White
Dropout %	26.2	35.3	33.3	40.0
Complete %	73.8	64.7	66.7	60.0

Table 2
Dropout and Completion Rates by Income

INCOME	First Semester (N=79) p>.05			Second Semester (N=87) p>.05		
	<$5K	$5K-$10K	$10K+	<$5K	$5K-$10K	$10K+
Dropout %	37.5	12.5	28.6	35.6	36.4	25.0
Complete %	62.5	87.5	71.4	64.4	63.6	75.0

Table 3
Dropout and Completion Rates by Age

AGE	First Semester (N=79) p<.05 *			Second Semester (N=87) p<.05 *		
	16-24	25-44	45-59	16-24	25-44	45-59
Dropout %	50.0	19.0	12.5	52.6	26.2	57.1
Complete %	50.0	81.0	87.5	47.4	73.8	42.9

*Chi-square values were .004 and .045, respectively. The accepted significance standard is $p < .05$. Therefore, the findings are statistically significant.

As Table 3 shows, a statistically significant relationship ($p < .05$) developed between age and completion of the program for both semesters. Table 3 shows older clients in the first semester (age groups 25-44 and 45-59) were more likely to complete the GLI program than clients in the 16-24 age group. In the second semester, clients of the 25-44 age group were more likely than the other age groups to complete the educational program in which they were enrolled.

Table 4
Dropout and Completion Rates by Institution Type

INSTRUCTION TYPE	First Semester (N=82) p>.05			Second Semester (N=76) p>.05		
	ABE	GED	Voc	ABE	GED	Voc
Dropout %	20.4	21.4	47.4	30.2	28.6	36.8
Complete %	79.6	78.6	52.6	69.8	71.4	63.2

Table 4 shows that no statistical significance at the .05 level developed when type of education and success rates were compared. Although the research intended to prove that vocation based education would be effective, Table 4 displays that ABE and GED classes had higher rates of retention. However, to adequately determine the effectiveness of type of education on program success, a comparison must be made from FY 1993-94 to FY 1994-95. Unfortunately, the data obtained from the 1993-94 information was not detailed enough to perform an appropriate comparison from one program year to the next.

Table 5
Dropout and Completion rates by Case Management

CASE MANAGEMENT (Total Retention)	Using 50% for randomness *(baseline = FY 1993-1994) **p<.001			Using Reported Percentages of FY 1993-94 *(baseline = FY 1993-1994) **p<.001	
	Random	Not Present	Present	Not Present	Present
Dropout %	50	82	20	82	20
Complete %	50	18	80	18	80

* The retention rates from the PA Department of Education report submitted by Goodwill Industries of Pittsburgh in FY 1993-94 were used as the baseline.

** The chi-square values were far below the accepted significance standard of $p < .05$.

Table 5 shows that case management proved to be a statistically significant factor affecting the completion of the GLI program. The chi-square statistic based on observed and expected frequencies of clients who completed or dropped out of the program was calculated using a generalized and random 50 percent. This randomness was chosen with the idea that neither personal barriers nor case management has an effect on student retention. Therefore, there is an equal probability that a student will dropout or complete the program. Another analysis was performed using the reported retention rates of the PA Department of Education report. The idea was that the presence of case management in the current year should yield the same retention rates as the 1993-94 program year. Both analyses showed that the implementation of case management was effective in predicting the successful completion of the program.

IMPLICATIONS & RECOMMENDATIONS

The findings of this research have policy implications not only for Goodwill Industries but also adult education programs and the formal education system. Case management proved to be a significant addition to the Goodwill Literacy Initiative. Administrators at Goodwill Industries obviously should consider maintaining case management in the program structure. In addition, the participation at other agencies might benefit from offering case management services. Table 5 shows that all educational providers need to be aware that: 1) personal barriers students encounter effect their ability to succeed, and 2) case management seems to be an effective systemic addition that positively influences student barriers.

This researcher recommends that future studies investigate the relationship between age and retention. Factors that might be causing a relationship could be the student's educational background, the instructional style taught to the student, or even the educational resources available to the student's school district.

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1995 Pennsylvania Adult & Continuing Education Research Conference

Refereed Papers

DISTANCE DELIVERY OF GRADUATE-LEVEL TEACHER EDUCATION: BEYOND PARITY CLAIMS

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ABSTRACT: Descriptions of and research on programs using distance education technologies to deliver graduate-level teacher education have indicated that such instruction is as effective as traditional on-campus instruction. A review of these practices in the light of adult learning theory and the contemporary educational context suggests that distance education has the potential to offer opportunities and results beyond those possible in traditional higher education settings, particularly when serving practicing professionals.

INTRODUCTION

A number of research studies have reported that distance education is both widely used and effective in delivering graduate-level teacher education. These studies report that knowledge gains following instruction via videoconferencing (Barker & Platten, 1988; Jones & Timpson, 1991; Lombardi, Bauer, Peters, &O'Keefe, 1991; McCleary & Egan, 1989) audiographics (Barker & Patrick, 1989; Knapczyk, 1990); audioconferencing (Burge & Howard, 1990); and computer conferencing (Davie, 1988; Harasim, 1987; Schrum, 1992) are comparable to those resulting from traditional face-to-face instruction. Such comparisons are useful in promoting the academic credibility of distance education courses. However, too great an emphasis on showing that distance education is *as good as* traditional education can obscure the ways in which and the extent to which distance education may offer opportunities and results *beyond* those possible in traditional educational contexts, especially when dealing with working professionals. As Weeks (1987) points out, "professionals constitute a unique type of learner upon which [educational] delivery may impact differently than on other learners."(p.1).

A review of recent studies of distance graduate teacher education from the perspective of adult learning theory suggests that distance education technologies offer teachers the *possibility* for graduate learning experiences more effective and satisfying than those provided by the on-campus experience. Cyril Houle (1980) recognized this possibility more than ten years ago in *Continuing Learning in the Professions.* Houle noted that while technology can be used merely to extend traditional delivery methods such as the lecture to larger audiences, educational technology also has "a variety and scope of application that allows it to be used in wholly novel

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ways" (p. 203) for continuing professional education. More recently, Hixson and Jones (1991) have suggested that distance education technologies may provide a vehiclefor the professional development of educators that is more effective than traditional practices such as workshops, in-service days, summer institutes, or higher education courses. These observations and the results of studies on the use of distance education for advanced teacher education support the conclusion that contemporary distance education is at last "challenging the dominance and alleged superiority" of traditional on-campus graduate instruction (Burge, 1993, 219).

CHARACTERISTICS OF ADULT LEARNERS

Malcolm Knowles (1984, p. 294) contends that "the quality of learning in graduate professional courses is positively related . . . to philosophical and psychological principles of adult learning." According to Knowles (1980), the adult learner is one who

- is more self-directing and less dependent than traditional-aged students;
- brings more experience and less naiveté to the learning experience;
- has motives for learning less related to conventional academic pressures than to changing vocational roles; and
- is problem or interest centered in an academic situation.

Although the appropriateness of applying these assumptions to the general population of adult learners has been questioned by other adult educators, Long (1987) argues that there is widespread agreement on the last point: adults are overwhelmingly problem-centered in their approach to learning. In other words, adults are ready to learn "when they feel a need to know or have a need to perform more effectively in some area of life" (Slotnick et al., 1993); this problem-centered orientation means that "adults typically want to use what they learn soon after they learn it" (Conti, 1984, cited in Slotnick et al., 1993). Additionally, while the applicability of the other assumptions to the general population of adult learners may be questioned, one could argue that the description accurately applies to a subset of that population: practicing professionals in continuing learning situations (Houle, 1980; Knowles, 1984).

The above description deals specifically with adult students' characteristics as learners and their motivations to learn. *Situational* differences between adult and traditional students will also have significant effects on both their achievement and their satisfaction with the learning experience. Most adults—particularly working professionals—have several roles demanding their time, energy, and money. Many adult learners must simultaneously balance the responsibilities of a student with those of a worker, a parent, a community member, a caretaker of aging parents, etc. (Houle, 1980; Long, 1987). For those experiencing such intense pressure on personal resources, the perceived effectiveness of an educational program could have as much to do with its ability to relieve (or at least to keep from increasing) this pressure as with course content.

BENEFITS OF ON-SITE INSTRUCTION

Distance education is especially well suited for the student who is also a practicing teacher because instruction can be delivered directly to the teacher's school or community; thus, those with whom the teacher studies are often those with whom he or she works. Knowles (1984), in discussing the implications of principles of adult learning for continuing education in the professions, notes that a professional's "readiness to learn what is perceived as essential"(p. 288) can be most effectively built upon by encouraging the professional-as-student to work and share with colleagues who have similar interests and needs. Learning with others who work within the same professional context and who are influenced by the same environmental factors and constraints can make learning and applying new knowledge especially effective: "During the discussions of any cluster of professionals, new ideas and techniques are spread. This process is particularly effective when it occurs in the easy familiarity of work settings in which people see one another day by day" (Houle, 1980, pp. 112–13).

This theoretical approach to the benefits of distance education for teachers is supported by research by Meccouri (1994), who reports that her study of preferred learning environments found that a small group of peers or colleagues was the most preferred context for continuing professional education. Jones and Timpson (1991) found that practicing teachers enrolled in site-based, technologically delivered graduate instruction valued the opportunity to take coursework at their worksites because this arrangement allowed them to work with colleagues as a faculty unit to relate new knowledge to their specific work situation. Egan, Sebastian, Welch, & Page (1992) report that participants in a graduate teacher education course taught at a distance believed that interacting with a small group of colleagues during a learning experience was extremely important; participants cited peer support, increased motivation, and group self-determination as benefits of learning with colleagues. Hessmiller (1994), in her discussion of a graduate special education course for practicing educators in correctional facilities, describes this collegial environment for learning as an improvement over the typical on-campus experience:

> Once on campus, teachers typically lose their professional status and are, as students, inundated with ideas, material, and suggestions for later application in their classrooms. Often what they learn is not applicable to their actual work settings.Professionals would be better served if training and information were delivered directly into their workplace and generated participant input. Research has shown that when learners are respected and brought in on the design and evaluation of the training, their approach to the content and consequent assimilation of the material is enhanced. (p. 130).

EXTENDED ACCESS TO GRADUATE INSTRUCTION

Distance education can provide increased access to graduate-level education. Many practicing educators in rural or remote communities have been denied advanced educational opportunities

because they did not live within commuting distance of a university. Other teachers may have had easier physical access to an educational institution, but have been constrained by demands on their personal resources that made spending the time and money required to attend on-campus instruction impossible. Distance education can both extend access and increase ease of access to graduate education for practicing professionals.

Until recently, practicing teachers in rural and remote areas were forced either to do without or to leave their homes and communities in order to pursue further educational opportunities. Poor accessibility to advanced training opportunities has contributed to ineffective or inadequate educational programs in rural schools as well as to high attrition rates among teachers in these areas. Distance education can provide a viable format for extending advanced educational opportunities to practicing teachers in rural communities (Hesmiller, 1994Johnson & Amundsen 1985; Knapczyk 1991; Sebastian and Egan 1994).

Johnson and Amundsen (1985) report on an audioteleconferencing program in Alaska which provided access for practicing teachers to an existing graduate special education certification program. According to the authors, one of the most important benefits of the program was that it "encouraged local people to remain in rural sites where attrition is generally very high, partially because of the lack of potential for professional development." Sebastian and Egan (1993) report similar results from a telecourse program offered by the University of Utah for the provision of graduate instruction to practicing special educators: over 80% of the teachers trained through the program remained in their local communities to teach students with special needs.

Knapczyk (1991) describes a program in which Indiana University collaborated with rural communities to offer educational opportunities geared to the needs of practicing teachers within each school in the project. He cites several important advantages to the use of audiographics for the delivery of distance education to rural educators: it makes possible participation in university-level training by personnel who otherwise would be unable to obtain it; it allows partnerships between educational institutions and school corporations suited to community needs; and it offers an opportunity for personnel from the same facility and community to learn together with a focus on common needs and interests.

Hessmiller (1994) discusses the advantages of distance education for delivery of coursework via audioconferencing and computer conferencing to practicing special educators in rural areas, particularly in juvenile and adult correctional facilities. Citing the difficulty faced by these professionals in obtaining the advanced educational training mandated by law, she promotes distance delivery of coursework as a solution to the problem of access. Hessmiller does not view distance education merely as an acceptable alternative to traditional instruction, however. With an increasing number of educators (see, ; Burge, 1993; Hixson and Jones, 1991 Johnson, 1992) she views distance education as potentially superior: "teleconferencing at the jobsite increases its learning potential. Answers acquired through conferencing, can be immediately applied in the work situation that houses the problem. Through the exchange of practical strategies and

discourse with peers, instructors, and mentors, participants become actively involved in a dynamic and growing course content" (Hessmiller, 1994; p. 130).

A TOOL FOR RESTRUCTURING THE SCHOOLS AND THE ACADEMIC COMMUNITY

Of considerable recent concern is the issue of whether today's practicing teachers, as well as those being trained in teacher education programs, will be adequately prepared for the job of teaching in the restructured schools called for by current educational reformers. Teachers will need to know not only how to operate the hardware and software that will characterize restructured classrooms, but also how to develop a curriculum and manage instruction using technology. Additionally, they will need to understand the benefits of each technology with respect to teaching and learning. Traditional programs of advanced training for practicing teachers are inadequate for these purposes (Lane & Cassidy , 1994 ;LeBaron & Bragg 1994).

Hixson and Jones (1991) contend that distance education is a tool that can facilitate achievement of these professional goals more efficiently, flexibly, and innovatively than would otherwise be possible. Failure to appreciate the advantages offered by technologically supported professional development "is particularly unfortunate in light of the rapidly increasing need for professional development to enable both current and prospective teachers and administrators to transform proposals for major changes in the organization and operation of elementary and secondary schools into meaningful realities" (p. 37).

As Meccouri (1994) notes, many practicing teachers "need to be brought into the 21st century" in terms of their familiarity with and understanding of the changes wrought by the technology revolution. As a result, LeBaron and Bragg's (1994) prescription for the integration of distance education, both as a content area and as a delivery method, into the pre-service education of teachers is equally valid for teachers who are already practicing. Practicing teachers who are taught via interactive communications technology benefit not only from increased familiarity and understanding of the different technologies but also by seeing their teacher educator model technologically enhanced practice that can later be adapted to their own teaching context.

Many administrators and teachers in rural districts are ready to engage in the long-term effort and study necessary to bring about school-wide reform (Wilsman & Wold 1991). However, the isolation of these districts from a university faculty with whom they can establish a collaborative project for the several years necessary to accomplish fundamental change has often hampered such efforts. A successful schoolwide reform project in rural Wisconsin used a variety of distance education technologies to establish collaboration between a university teacher educator and the administrators, principals, and teachers of seventeen small, rural schools. In this case, "the main instructional objective was that the district leadership team should negotiate meanings and understandings about practice and changing practice" (p. 65); implementing new instructional strategies was a secondary objective.

To date, distance education has usually been used for purposes less comprehensive than that of schoolwide reform or restructuring. However, the ability of interactive technologies to provide opportunities for long-term, continuous dialogue between the teacher educator and the groups of colleagues at each site can facilitate establishment of "the kind of trust, mutual respect, and understanding that is required for successful schoolwide change" (Hessmiller, 1994, 67). Johnson (1992) argues for the possibility of an even more far-reaching result: through distance education, educators may be able to reconstruct the concept of a community of scholars:

> Education at a distance. . . is an experimental community coming to be. . . . Education at a distance, though appearing to fail to meet the traditional institutional criteria that once, but no longer, characterize higher education can, if it chooses, both reconstruct community and bridge education to the world "outside" in a way more profound than conventional education. (p. 6-7)

CONCLUSION

Distance education is widely accepted as an effective alternative to on-campus delivery of graduate-level coursework for practicing teachers. However, many educators are going beyond parity claims to a belief in the superiority of distance education for some purposes and in some situations. The convenience, flexibility, and interaction offered by the newer communications technologies make them especially well-suited for the continuing professional education of teachers who need access to new knowledge and perspectives. Additionally, receiving instruction via these technologies can facilitate in teachers a greater understanding of and familiarity with the concepts and practices they will need to use in the restructured schools of tomorrow. Finally, distance education technologies allow the movement of ideas, rather than people, providing opportunities for the development of academic communities that are not bound by place and/or time constraints.

It is important to note that distance educational technologies offer the *potential* for—rather than ensure—the effective graduate education of practicing teachers. As with traditional face-to-face instruction, achievement of this potential depends on careful planning in the design and delivery of instruction as well as awareness of and attention to the values the underlie the educational enterprise. Given such care and attention, distance education can be a powerful tool in the continuing development of both individual professionals and professional communities.

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1995 Pennsylvania Adult & Continuing Education Research Conference

Refereed Papers

LITERACY AND THE LEARNING PROCESS: A DESCRIPTION OF THE LEARNING STRATEGIES SELECTED BY LOW-LITERATE ADULTS ENGAGED IN SELF-DIRECTED LEARNING

Roberta Uhland

ABSTRACT: The purpose of this study was to describe and examine the learning strategies selected by adults with literacy limitations who are engaged in self-directed learning. Self-directed learning was delimited to the lived experiences of the respondents occurring outside of organized educational settings. A modified version of the Self-Knowledge Inventory of Lifelong Learning Strategies (SKILLS) was selected to examine which learning strategies wereselected as well as the frequency. Data revealed that strategies within the metacognitive area were most frequently selected to solve a task and to manage learning decisions. Other strategy areas examined included: metamotivation, memory, resource management and critical thinking. Results indicated that low-literate adults do consciously select learning strategies and that the strategic behaviors could be evaluated according to frequency as well as context. Findings suggest that specific strategy areas have greater importance than others to low-literate adults and that specific strategies appear to be task specific.

INTRODUCTION

Recent research studies within adult literacy education have established that little is known about the learning processes employed by low-literate adults either within or without an educational setting (Barer-Stein, 1991; Fingeret, 1992; Horsman, 1991). Review of meta-analyses of research on self-directed learning confirmed that fewer than six inquiries have examined learning that occurs during the lived experiences of adults with literacy limitations (Confessore & Long, 1992; Long & Confessore, 1992). No published studies have specifically examined the learning strategy behaviors selected by low-literate adults within the context of their lived experiences. Moreover, literacy educators have suggested that this paucity of research may be related to the deficit perspective that society holds of these learners that fosters the belief that low-literate adults are incapable of exercising informed, competent choices about learning tasks (Beder, 1991; Fingeret, 1992). Relying on the relevant literature from adult education, educational and cognitive psychology and adult literacy education, a conceptual framework was established to guide the research (Table 1).

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Table 1
Summary of Analytical Framework

Literature Review	Working Hypotheses
Human beings make conscious, intentional decisions about the process learning (Houle, 1961)	Low-literate adults exercise independent of judg ments about learning
All adults engage in self-directed learning (Knowles, 1976; 1980)	Low literate adults are self-directed learners
Learning strategies can be distinguished from coping strategies knowl(Center for Literacy Studies, 1992)	The learning goal of the low-literate is to solve learning tasks by acquiring new edge through assuming responsibility for the learning process. Coping strategies refer to behavioral responses to learning, rather than cognitive responses
Illiterates are perceived as unable to take control over their learning (Beder, 1991; Fingeret, 1982, 1983)	Low-literate adults recognize learning situations and proactively act to assume the responsibility for their learning

The purpose of this study was to determine: (a) if discrete learning strategies areas are selected by low-literate adults; (b) which specific strategies are selected within each strategy area; (c) the relationship between strategy selection and learning context; and, (d) the relative values of the various selected strategies.

METHODOLOGY

The research was divided into two stages. Stage 1 employed a qualitative design to discover the learning strategies selected low-literate adults. During Stage 2, twenty-five low-literate adults from an urban based literacy program responded to the modified Self-Knowledge Inventory of Lifelong Learning Strategies (SKILLS). The modified SKILLS was constructed using the lived experiences and the learning strategies reported by the two groups of respondents in Stage 1.

The modified SKILLS presents six different learning scenarios that occur outside of an organized educational setting. Each learning scenario included 15 discrete strategies. These strategies represent the areas of metacognition, metamotivation, memory, resource management, and critical thinking. The respondents were required to make a forced choice by prioritizing the 15 strategies into three categories each consisting of five strategies: (a) "Yes, I would use;" (b) "Maybe, I might use;" and, (c) "No, I would not use." The responses were examined using

standard descriptive statistical analysis.

PRESENTATION OF DATA

Interviews from Stage 1 discovered 15 discrete learning strategies used by low-literate adults. Strategies were categorized into five strategy areas (Figure 1).

Metacognition	Planning Checking Adjusting
Metamotivation	Attention Confidence Reward
Memory	Organization External Application
Resource Management	Identifying Human Critical Use
Critical Thinking	Generate Alternatives Test Assumptions Conditional Acceptance

Figure 1: Learning Strategy Behaviors

From data obtained during Stage 2 (administration of the modified SKILLS), the 15 strategies were ranked according to frequency of selection within strategy area (Table 2); by overall frequency of selection (Table 3); and, by frequency according to scenario (Table 4).

Table 2
Means of Individual Learning Strategies—Grouped

STRAT.	AREA-TYPE	YES	NO
1	MC-Planning	19.1	5.8
2	MC-Checking or Monitoring	19.1	5.8
3	MC-Adjusting	22.2	2.8
4	MOT-Attention	16.5	9.5
5	MOT-Confidence	14.7	10.3
8	MOT-Reward	13.6	11.3
9	MEM-Organization	21.8	3.2
11	MEM-External	18.5	6.2
13	MEM-Application	18.4	8.7
6	RES-Identifying Resources	15.7	9.3
10	RES-Use of human resource	14.0	11.0
14	RES-Critical Use	11.4	13.7
7	CRIT-Generate Alternatives	17.3	7.7
12	CRIT-Test Assumptions	16.0	9.0
15	CRIT-Conditional Acceptance	15.7	9.3

There is significant variation within each category. The adjusting strategy demonstrated the highest selection score compared to any other strategy. The strategies grouped with metacognition tended to have the lowest rejection scores. Overall, metacognitive strategies received the highest selection scores.

Table 3
Rankings of Strategy Selections (limited to top 10)

Strategfy	Rank	Mean
MC-Planning	1	13.8
MC-Checking	2	11.8
MEM-Organization	3	10.5
CRIT-Generate Alternatives	4	10.3
RES-Identifying Resources	5	10.0
CRIT-Conditional Acceptance	6	9.2
MOT-Attention	7	9.0
MC-Adjusting	8	8.5
MEM-External	9	7.3
RES-Use of human resource	10	6.7

Table 4
Means of strategy Areas by Individual Scenario

Scenario	Metacog.	Metamot.	Memory	Resource	Crit. Thnk.
Vocational	1.7	.7	.8	.9	.8
Financial	2.0	.7	.9	.6	.8
Political	1.2	.8	1.0	.8	1.3
Domestic	1.6	.8	1.2	1.3	1.4
Interpersonal	1.3	.9	1.2	1.2	.6
Religious	1.6	.9	.9	.8	.9

FINDINGS

Stage 1 of the study revealed that low-literate adults do assume responsibility for the learning process and make conscious, informed choices about strategic behaviors. Moreover, they are able to identify discrete learning strategies and make selections among various types of

strategies. Data analysis disclosed that there was considerable variation among the strategies selected, as well as within the various strategy groups. The strategy area of metacognition demonstrated the highest overall frequency of selection, the least variation between specific strategies, and the lowest rejection rates. Resource management revealed the greatest variation within individual strategy selection, as well as the highest rejection rates. Three metacognitive strategies were among the five highest-rated strategies. Evaluation of strategy selection across individual scenarios again indicated that metacognitive strategies had the highest overall selection rate; however, there was greater variation among the strategy areas dependent on context.

IMPLICATIONS

The study found that low-literate adults assume control of learning situations that occur within the context of lived experience. They exercise control of the learning process through implementation of strategic behaviors, More specifically, this inquiry confirmed that these learners recognize the need for learning strategies and make choices among specific strategies grouped within a strategy area, as well as make strategy selections based on learning context. The findings suggest that low-literate adults are not relegated to merely coping with a learning task. Rather, they assume active control and responsibility for learning. These findings dramatically contrast with the existing deficit perspective model. Moreover, these findings raise a number of questions about the existing perceptions of low-literate adults within literacy education: What is the nature of learning that occurs? Does assuming control of learning alter or modify participation in organized adult education? What type of knowledge can low-literate adults contribute to adult learning theory?

This inquiry was but a first step. Further research needs to be directed to develop a clearer understanding of the context, content and process of learning among those with literacy limitations.

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1995 Pennsylvania Adult & Continuing Education Research Conference

Refereed Papers

THE PRACTICAL NEEDS OF NON-TRADITIONAL WOMEN IN HIGHER EDUCATION: THREE WOMEN'S COLLEGES

Suzanne C. Watson

ABSTRACT: Non-traditional aged women comprise a majority of enrollees in higher education. Their numbers are expected to continue to increase while the number of traditional-aged students declines. This study reviewed the literature and determined six areas of practical needs of non-traditional aged women in higher education: (1) criteria for admissions that do not rely entirely upon standardized test scores and high school references; (2) availability of credit for life and work experiences; (3) financial aid for non-traditional aged, part-time students; (4) facilities for care of students' children; (5) student services to meet the needs of non-traditional aged women; and (6) classes scheduled to accommodate work and other responsibilities of non-traditional aged women. The catalogs of three women's colleges (Bryn Mawr College, Mills College, and Ursuline College) were analyzed to determine whether these needs were addressed.

Admissions and credit issues were addressed most comprehensively by Ursuline College. None of the schools provided information about financial aid designated for non-traditional aged students. Childcare facilities were described by Bryn Mawr and Mills and not mentioned by Ursuline. Student services for non-traditional aged women were provided by Mills College. Ursuline had a diverse course delivery system.

INTRODUCTION

Women are returning to higher education in ever increasing numbers. According to the *Digest of Education Statistics, 1994*, in 1970 women 25 and older comprised 167,000 full-time students and 712,000 part-time students. By 1991 these numbers had escalated to 964,000 full-time students and 2,836,000 part time students. Projections for 1998 are 923,000 full-time students and 3,108,000 part-time students. This increase in enrollment by women over 25 has been accompanied by a decline in enrollment among traditional college-aged students. As a result, women are the majority of undergraduates, comprising 55 percent of all enrollees in higher education (Landscape, 1993). As the traditional-aged population declines, the sheer force of numbers will encourage institutions of higher education toward innovations to appeal to this new market of highly motivated and responsible students. When compared with traditional-aged female students, reentry women were found to be more self motivated (St. Pierre, 1989, p. 231) with higher educational goals and higher grade point averages (Glass & Rose, 1987, p. 117).

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PRACTICAL NEEDS OF NON-TRADITIONAL AGED WOMEN IN HIGHER EDUCATION

Non-traditional aged female students are women 25 years or over who have enrolled in higher education. This cohort is not homogeneous, as it includes women from different socioeconomic backgrounds with diverse educational and career experiences. Their needs, goals, values, expectations, and fears, however, differ from those of traditional college-aged students, the population toward which most higher education services are directed. The literature presents a general consensus of practical needs of non-traditional aged students: (1) admissions; (2) credit issues; (3) financial aid; (4) childcare; (5) student services; and (6) class scheduling.

Admissions. Admission constraints are mentioned by several researchers as presenting obstacles to the non-traditional aged woman student (Lewis, 1988; Fagan & Williams, 1991; Glass & Rose, 1987; Petersen, 1991; St. Pierre, 1989). The requirement of Scholastic Aptitude Test (SAT) or American College Testing (ACT) is discriminating as original test scores of non-traditional aged students may be considered outdated, and the prospect of retesting is intimidating to many adult learners. Considering the lapse of time that may have occurred and the mobility of the population, transcripts and letters of recommendation from high school faculty or administrators are often difficult to obtain.

Credit. Ease of transfer of credits from other institutions and credit for life experiences are described as practical needs for non-traditional aged women returning to higher education (Lewis, 1988; Fagan & Williams, 1991; Petersen, 1991). Returning women may have attended several different institutions of higher education since graduation from high school. Often credits earned are not deemed "timely," and no credit is given. The learning and life experiences of returning women are often not given credence or credit when applying for admittance to a college or university.

Financial Aid. The lack of adequate financial aid is cited often in the literature as a barrier for returning women (Lewis, 1988; Fagan & Williams, 1991; Glass & Rose, 1987; Petersen, 1991; St. Pierre, 1983; Calloway & Jorgensen, 1994). Eligibility for many grants, loans, stipends, and scholarships is contingent upon students' attending school full time. Because of job, family, financial, or other constraints, the majority of women enrolled in higher education are part-time students. Aid or loans to students may be based on a spouse's income even when it is not contributory (St. Pierre, 1983). Financial aid services often don't attempt to identify and inform applicants of scholarships and grants that are designed specifically for non-traditional women.

Childcare. Most reentry women continue to bear the bulk of the responsibility for childcare (Petersen, 1989, p. 44). Returning students often mention the availability of convenient and affordable childcare as a pressing problem (Lewis, 1988; Glass & Rose, 1987; Petersen, 1989; St. Pierre, 1983; Calloway & Jorgensen, 1994).

Student Services. Student services as used here encompass orientation to the campus and college

life, information about key resources on campus, seminars on topics of interest to students, academic and personal counseling, and career advisement. These needs are identified by several researchers (Lewis, 1988; Harrington, 1992; Glass & Rose, 1987; Petersen, 1991; St. Pierre, 1983; Calloway and Jorgensen, 1994).

Class Scheduling. Since adult learners frequently have to coordinate their academic endeavors with full-time jobs and familial responsibilities, they desire flexibility in scheduling their classes (Lewis, 1988; St. Pierre, 1983; Calloway & Jorgensen, 1994).

THREE WOMEN'S COLLEGES

The catalogs of three women's colleges were examined to determine what provisions these colleges have made to respond to the six categories of needs of non-traditional women enumerated above.

Bryn Mawr

Bryn Mawr College is a four-year private liberal arts university near Philadelphia, Pennsylvania. Undergraduate enrollment consists of 1,176 full-time women students and 16 part-time women students (College Handbook, p. 1262). The residency requirement is stringent; each student must complete a minimum of 24 units (four semester hours equals one unit) while in residence at Bryn Mawr. The senior year must be spent in residence.

Admissions. Women beyond the usual college entry age may apply for admission to the Katharine E. McBride Scholars Degree Program as provisionally matriculated students. Upon satisfactory completion of a structured sequence of courses, a McBride scholar may apply for formal matriculation to the undergraduate college. Particulars about requirements for admission to the McBride program are not provided in the catalog.

Credit Issues. McBride scholars may transfer up to 16 units into Bryn Mawr. Advance Placement Test scores from the College Board may be accepted. Other possibilities for earning credit are not provided.

Financial Aid. All applicants for financial aid must submit the Free Application for Federal Student Aid (FAFSA) and the Bryn Mawr College Financial Aid Application. Funding is available through federal programs and five funds established by alumnae and friends of the College. None of the five funds are designated for non-traditional students.

Childcare. Childcare is available for Bryn Mawr families on a space-available basis at the New Gulph Children's Center and at the Phebe Anna Thorne School. The fee scale is based on the age of the child and the number of hours. Flexible schedules can be arranged to accommodate the programs of students.

Student Services. Bryn Mawr offers extensive student services, but none of them appears to be exclusively for non-traditional aged students.

Class Scheduling. The emphasis at Bryn Mawr is on full-time classes by resident students. McBride scholars, however, may study on a part-time or full-time basis. No more than four units earned in summer school may be counted toward the degree; of these, no more than two units may be earned in any one summer. Information about the scheduling of classes was not provided.

Mills College

Mills College is a four-year private liberal arts college for women located between San Francisco and Berkeley, California. Undergraduate enrollment consists of 777 full-time women students and 562 part-time women students (College Handbook, p. 301). Students 23 or over make up 25 percent of Mills undergraduate population. These "resumers" are considered members of the Mary Atkins organization and are eligible to use the Mary Atkins Lounge.

Admission. Resuming students will be considered on the basis of their high school and/or previous college records, their work experience, if any, and other evidence of ability and motivation. The SAT is required only if a resuming student submits fewer than 12 transferable units of recent college credit. High school transcripts are required of all applicants. Resuming transfers may substitute one employer recommendation for the recommendations by two college instructors that are normally required. Resuming freshmen may submit one or two employer recommendations in lieu of instructor recommendations if they are not currently in college.

Credit Issues. Up to two years of a normal course load at an accredited community or four-year college are acceptable for transfer. Not all course work taken at other colleges may be counted toward fulfillment of the Mills major or degree requirements. An applicant may submit a maximum of four College Level Examination Program (CLEP) examinations for consideration prior to enrolling. Credit will only be granted for single subject tests passed at or above the 65th percentile. No more than two credits may be accepted in any field.

Financial Aid. Mills institutional funds (scholarship, loan, work-study) are awarded only to full-time students pursuing their first undergraduate degree. No funds or scholarships are specifically designated for returning women.

Childcare. Mills' Children's School is for children three months to 9 years of age. Its primary function is to provide a laboratory in child development for training early childhood professionals. Children of students and staff of Mills College are given priority as long as the criteria for gender, ethnicity, and age within the classrooms can be maintained.

Student Services. The Mary Atkins Organization provides a special orientation program for resuming students each semester. The Mary Atkins Lounge includes space for studying, relaxing, and meeting with other students. Resuming Student Assistants are sources of information on all areas of Mills life. They provide educational and social programs and hold regular office hours.

Class Scheduling. Evening classes are offered for part-time, non-degree, and advanced students. Seminars are scheduled for 2 1/2 hours once a week.

Ursuline College

Ursuline College is a private, four-year liberal arts college for women located outside of Cleveland, Ohio. Undergraduate enrollment consists of 1,314 women students (College Handbook, p. 1213). The student body is composed of 60 percent adults, which Ursuline defines as students 23 years of age and older. Of the 300 new students each year, one half are 30 or over (Carfagna, 1995). The Ursuline Studies Program required of all students is an adaptation of Women's Ways of Knowing (Belenky, Clinchy, Goldberg, & Tarule, 1986) to the general education core curriculum.

Admission. All applicants must submit a personal statement and an official high school transcript or GED. An applicant 23 or older is not required to submit ACT or SAT scores or a recommendation from a teacher or counselor.

Credit Issues. Ursuline students have the option earn credit through the College Level Examination Program (CLEP). Students may test-out of authorized catalog courses. They may also apply for credit through prior learning assessment. This learning must be equivalent to college-level instruction, measurable, and verifiable. Students may use up to 43 credit hours of Test-Outs, in conjunction with CLEP and Prior Learning or Work-Related Learning, toward graduation.

Financial Aid. No scholarships or grants are designated for non-traditional aged students.

Childcare. No childcare facilities are mentioned in the catalog.

Student Services. Counseling and Career Services provide personal and career counseling, testing, job placement, and coordination of internships and cooperative education. No student services are designated particularly for non-traditional aged students. Returning adult students may enroll in the Introductory Seminar of the Ursuline Studies Program as a six-credit, one semester course or as a six-credit, two semester course. This seminar serves as a transition to the college experience. It offers diversified learning activities that strengthen students' abilities to speak and write effectively, to interact with other in groups, to read and interpret challenging texts, and to progress smoothly through the remainder of their studies.

Class Scheduling. Day courses meet one, two, or three times weekly. Evening courses ordinarily meet one night per week. Saturday courses are scheduled so that students may take two courses per Saturday and be finished by mid-afternoon. Flexi-Schedule classes are regular catalog courses that are offered in a format which combines independent study with concentrated classroom instruction. Summer courses are scheduled in a variety of condensed formats.

CONCLUSION

The Katharine E. McBride Scholars Degree Program is the only evidence that Bryn Mawr acknowledges the needs of non-traditional students. Mills College responds to its one-quarter non-traditional student population by exempting resuming students from the SAT and permitting employer recommendations in lieu of instructor recommendations. Transferring up to two years of a normal course load from accredited institutions is acceptable, as are successfully completed CLEP examinations. The Mary Atkins Organization provides orientation and a designated lounge for the exclusive use of non-traditional aged students. Resuming Student Assistants provide informational and educational programs for non-traditional students and are available for individual counseling. At Ursuline College, older applicants need not submit ACT or SAT scores or a recommendation from a teacher or a counselor. Ursuline provides three ways of earning credit beyond actual coursework: CLEP, Test-Out, and Prior Learning and Work-Related Learning assessment. With a large number of older students, the usual hesitation of non-traditional students to utilize student services may not exist at Ursuline; hence, there may not be a need for separate services for them. The Introductory Seminar of the Ursuline Studies Program provides orientation to campus and college life and interesting, relevant topics for discussion and learning. Ursuline offers traditional day courses, evening courses, and Saturday courses. Flexi-Schedule courses combine independent study with concentrated classroom instruction. Summer courses are available in condensed formats.

None of the three institutions examined responded to all six categories of practical needs of non-traditional women students. Admissions and credit issues are addressed most comprehensively by Ursuline. None of the schools provides information about financial aid designated for non-traditional students. Childcare facilities are scantily described by Bryn Mawr and Mills and not mentioned by Ursuline. Since this is one of the most pressing needs expressed by non-traditional women, it is vital to address the issue. The ideal of a separate women's center for non-traditional women students is approached by Mills with the Mary Atkins Organization. Ursuline's diverse course-delivery system with evening, Saturday, and flexibly scheduled classes appears to meet the needs of non-traditional women.

This lack of response to the practical needs of non-traditional aged women by these three women's colleges is surprising. Jadwiga S. Sebrechts, Director, Women's College Coalition, says that older women "account for about a third of the enrollment at women's colleges" (Gose, 1995, p. 22). In light of the increased numbers of women returning to higher education and the desire of women's college to increase their enrollments, this cohort should be courted.

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PA-ACERC

SYMPOSIA

Pennsylvania Adult and Continuing
Education Research Conference

September 30, 1995

INTERNATIONALISM IN CONTINUING AND DISTANCE EDUCATION: THE DYNAMICS OF RESEARCH AND PRACTICE

ABSTRACT: Internationalism in continuing and distance education is becoming increasing common place. Continuing educators are taking on new program planning roles and must acquire new competencies to prepare for their changing roles. What are the problems facing learners, teachers and administrators entering the international distance education arena? Relevant domains for exploration of these problems of practice include: administration, pedagogy, technology and culture (Moore, 1994).

INTRODUCTION

What is the role of technology in increasing access and instructional effectiveness in international distance education? How do cross-cultural issues impact programming? What unique knowledge and skills are necessary for international distance education projects, i.e., needs assessment, program planning, delivery and evaluation? The purpose of this symposium is to raise questions and initiate discussion around the four domains of international distance education that will inform both practice and research in transnational collaborative program planning.

The four articles in this symposium each address the four domains of practice. Childers reviews the administrative, pedagogical and cultural domains for an environmental engineering program designed for delivery in Morocco. Shafer reviews the administrative, pedagogical and technological domains for a comprehensive program of instructional modules that will delivered at a distance throughout North and South America. Nouri reviews the pedagogical and cultural domains for planning and delivery of two international distance education programs using audiographics and videoconferencing in various sites throughout five countries. Hodes reviews the technological domain for distance education programs in China

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BUILDING CONTINUING EDUCATION CAPACITY IN MOROCCO

Jeri L. Childers

Penn State and the Ecole Nationale de L'Industrie Minerale (ENIM) in Morocco are working collaboratively on the joint development and delivery of environmental engineering programs in Morocco. The project, which is funded by USAID, is designed to build the skills of continuing educators in Morocco in the areas of marketing research, client development, marketing communications, program design and program delivery. This project creates a transnational team that will use audio conferences as well as faculty and staff exchanges to develop culturally sensitive models for program planning in Morocco.

ADMINISTRATIVE ISSUES: IMPLICATIONS FOR RESEARCH

Continuing education in Morocco is not extensively developed. Three critical issues must be addressed if continuing education capacity is to be enhanced in Moroccan. One major issue is the existing discrepancy between the needs of the private sector and programs offered by Moroccan continuing education operations. This will require a restructuring of the continuing education function within the Moroccan university system.

CULTURAL ISSUES: IMPLICATIONS FOR RESEARCH

A second major issue is the general lack of awareness of the value of continuing education among the employers of engineers in Morocco. In the U.S. multiple pressures are exerted on American engineers that lead to participation in continuing education, i.e., employers needs to stay competitive, employees needs to advance his/her career, professional associations that urge participation in continuing education, and state licensure requirements. Currently these pressures do not exist in Morocco. Continuing educators in Morocco will need to develop strategies to work with business and industry.

PEDAGOGICAL ISSUES: IMPLICATIONS FOR RESEARCH

A final issues has to do with the delivery of programs to engineers in Morocco. Moroccan continuing education facilities, educational procedures, and organizational structures do not provide the type of environment, technologies, or educational strategies that are required by adults. The challenge will be to develop sound pedagogical strategies that are sensitive to the cultural context. A model of joint program development and team process has been chosen to build a cultural understanding among team members and to ensure that administrative and pedagogical strategies are appropriate for the Moroccan context.

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EDUCATIONAL PARTNERSHIPS THROUGH DISTANCE TECHNOLOGY

Dehra Shafer

CREAD—Consorcio-red de educacion a distancia—is a consortium of universities striving to address local distance education needs through the forging of inter-American partnerships. CREAD is committed to crossing linguistic and cultural barriers to further the use of distance technology for educational purposes in the western hemisphere. The original idea for a consortium of this type came from the Tele-Universite of Canada and the Universidad Nacional de Mar del Plata of Argentina.

ADMINISTRATIVE ISSUES: IMPLICATIONS FOR RESEARCH

Administratively, the main office of CREAD is now housed at Penn State under the oversight of Penn State Continuing and Distance Education. The strength of CREAD, however, is in its structure as a membership organization. CREAD is composed of a network of institutions and individuals throughout North, Central, and South America joining resources and expertise to redefine educational partnerships through distance technology for the 21st century.

CREAD functions as a service organization, a network, and a facilitator of joint projects. It researches and disseminates information on human, technical and financial resources that may be available to its institutional members. It researches and disseminates information on human, technical and financial resources that may be available to its institutional members. Those findings will be included in this presentation.

PEDAGOGICAL ISSUES: IMPLICATIONS FOR RESEARCH

As one of its first projects, CREAD formally assessed the state of distance education and found training to be a universal need. This paper also will describe how CREAD has identified solutions to address this need for training in a global arena. As one solution, the consortium has developed a comprehensive program of instructional modules about distance education. Pedagogical issues surrounding the development of these modules and the implications for research on training needs will be discussed.

A second initiative will be the first Inter-American Distance Education Conference of CREAD, October 23-25, 1995. Local conferences will convene at nine, proposed sites throughout the Western Hemisphere to offer participants programs created to meet their learning needs in distance education. Periodically throughout the three-day conference, the local sites will use

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technology to "meet" with the other sites to discuss issues of mutual concern.

TECHNOLOGICAL ISSUES: IMPLICATIONS FOR RESEARCH

Technologically CREAD will be breaking new ground during this conference. When members are joined via audio conferencing, there will simultaneous translation of the speaker's presentation into three other languages. Members of CREAD speak English, Spanish, French or Portuguese. Computer software also will provide translation of written documents overnight during the conference so that written communication can be shared with all participants on the second and third days of the conference. Documentation of this initiative will provide a basis for research of the cultural barriers that must be addressed if distance technology is to be used successfully across countries and continents.

USING AUDIOGRAPHICS AND VIDEOTELECONFERENCING TO ENHANCE GLOBAL INTERACTIVITY AND LEARNING

Vida Nouri
Carol Dwyer
Eric Spielvogel
Wendy Snetsinger

Audiographics is a technology that combines telephone conferencing with on-line computer link-ups through a telephone modem for text and scanned image transmission. Videoteleconferencing, which includes the added dimension of live motion video, is also transmitted through telephone lines using specialized compression protocols and equipment and is also available at a fraction of the cost of video sent and received by satellite. Implementing these technological tools in a creative way can be a valuable asset for coursework learning, as well as aid in increasing interpersonal understanding and communications on local, regional, or global levels.

CULTURAL ISSUES: IMPLICATIONS FOR RESEARCH

The concepts for two special international distance education events, one by audiographics, the other by video teleconference, developed as the result of group projects for two courses held at a large university: "Introduction to Distance Education" and "Introduction to Teleconferencing in Distance Education." Both courses included assembling students and occasional guests in various sites within five countries: Finland, Estonia, Mexico, Canada and the U.S.A.

The themes of a distance education "Holiday Fiesta" and "Cultural Showcase" developed as a result of wanting to take advantage of the rich array of cultural diversity that existed between class sites and among students within those sites. Audiographics and teleconferencing not only provided an avenue for learning at a distance, but it also provided an opportunity for the richness and diversity of other cultures and personal perspectives.

PEDAGOGICAL ISSUES: IMPLICATIONS FOR RESEARCH

Evaluations of this teleconference by participants from all the sites both on the day of the teleconference and later using e-mail indicated that the strategies employed in the design of this teleconference did exactly what they were intended to do: engage, motivate, and spark interaction and collaboration between learners through the sharing of cultural materials.

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Although the aforementioned were special distance education events, even "routine" programs can take advantage of the cultural wealth of the international community through creativity and careful planning. Using technologies, such as audiographics and two-way videoteleconferencing, in imaginative ways to build interactive networks for human learning and regional and international goodwill, are among the many significant potential outcomes of these tools.

ISSUES AND DIRECTIONS FOR ADULT HIGHER EDUCATION IN CHINA

Carol L. Hodes

China's current situation is the adaptation of capitalist modes of operation within its socialist economic framework. The Chinese economy is growing rapidly and China hopes to emerge as a world economic power. However, a total population of 1.2 billion strains the nation's economy. The four official "modernizations" are agriculture, industry, defense, and science and technology, which play a major role in determining the emphasis in adult education.

TECHNOLOGICAL ISSUES: IMPLICATIONS FOR RESEARCH

Recent official announcements emphasize science and technology education. China's primary need is to improve the quality of its workforce for the new technological and industrial jobs. China has few computers for its total population plus an inadequate communications infrastructure. Computer assisted instruction (CAI) is seen as a way to deliver instruction efficiently, but presently there is little CAI. Faculty at major universities presently use a Chinese version of the Internet, CERNET. Faculty commonly share terminals and passwords. However, the Internet is not yet used for teaching.

The average distance learner is age 30 and is an "in-service" worker. These are workers who are employed and need to upgrade their skills or earn degrees to be promoted. In the more academically-oriented programs, students, who are called "all subject" learners, are given six years to complete a college degree. A cohort exists of workers who had their education interrupted by the Cultural Revolution (1966-76).

China considers itself a leader in distance education technology for higher education. China's Radio and TV University began in 1976 at the end of the Cultural Revolution to meet the needs of adult education and to produce the large number of trained workers required by society. TV University has been very cost effective and reaches learners who are outside the regions of the traditional urban-based universities.

There is currently an under supply of higher education in China. Educational expansion has placed a strain on the finances of many institutions. The government is challenged to produce a quality workforce capable of productivity required in their economic expansion, which will mean an emphasis on further development of both distance and adult higher education.

China's investment in radio, TV and print media will prove invaluable as it expands and refines its present distance education efforts. More distance education will be needed to meet the needs

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of the growing population of adult learners. A primary need is to upgrade the communications infrastructure and increase access to technology. Simultaneously, distance educators must investigate new models of computer delivery including CAI for stand-alone systems and wide-area networks designed to allow interaction between learners and universities. Research and evaluation units have been established within the radio and television university organization. These units will track success of learners and determine distance education course models for the future.

CONCLUSION

Internationalism in continuing and distance education is changing the roles for continuing educators. The purpose of this symposium is to create a dialogue around the issues facing program planners in the areas of administration, pedagogy, technology and culture with the purpose of informing both practice and research that focuses on transnational collaborative program planning.

WHY ARE WE NOT DOING RESEARCH?

Patricia Lawler
Trenton R. Ferro

This is certainly a complicated question for adult educators, and there are no easy answers. However, it must be addressed. This question is raised by our graduate students who seek a foundation for their work, it is raised by our colleagues in other disciplines as we suggest alternative teaching and learning methods, and it is raised by funding sources who are increasingly "tight" with their monies. A better question may be: What kind of research are we doing? Or: Where do we find our research? This symposium and, hopefully, the ensuing discussion will seek to answer these questions and pose challenges for faculty, practitioners, and students in the field of adult education.

In 1983 Huey Long wrote, "Whereas the education of adults and the concept of lifelong learning have a rich and lengthy history, adult education as a professional discipline or field of practice is a very recent phenomenon" (p. 20). Long, along with many others who wrote during the 1980s, described the field of adult education as developing, emerging, growing, and expanding. While this observation may still be true and should serve as a critical imperative for the discipline to stay current, it can no longer be an excuse for the paucity of research in adult education. Using the youth of our field as a rationale, adult educators strove to establish themselves first as practitioners and then as researchers. Now, a decade and more later, we need to take stock of our discipline, look at the history of our research agenda, and reexamine its consequences for us.

Several issues come to mind as we examine this predicament. First, a running theme throughout our history has been the question: What kind of research do we do? Is it basic or applied? Second, who is doing the research? Third, where do we find this research? How is it disseminated to those in the field and the larger community of those interested in educating adults? Finally, what impact have funding sources had on the direction and quantity of research?

BASIC OR APPLIED?

Adult educators have prided themselves on their practitioner orientation. Our publications are replete with descriptions of practice, presentations of applied research, and stories of our work.

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Rosemary Caffarella, a prominent writer and researcher in the field, has described us as "practitioner researchers" who do our best work as it relates to our practice (Personal communication, August, 1995). Adrian Blunt (1994) details this perspective when she reports that the growth in programs and participation from the 1950s through the 1970s "resulted in early adult education research efforts being focused on program needs and pedagogical concerns" (p.184). It appears that this orientation is continuing today. A recent study of graduate students and their research contributions to *Adult Education* and *Adult Education Quarterly* found that, from 1969 to 1988, the content of research appeared to be "increasingly pragmatically oriented" (Blunt & Lee, 1994, p. 139). What impact does this have for us today?

The literature now addresses this dilemma between applied and basic research in our discipline (Blunt, 1994; Deshler & Hagan, 1989; Imel, 1989). Applied research has been described as "research directed toward resolving problems of practice" (Blunt, 1994, p. 182). This is a comfortable place to be for adult educators who have been involved from the beginning with facilitating the learning, growth, and social improvement of adults. As we have been practicing our profession, we have been describing it in our journals and books and at our conferences and meetings. Pragmatism—solving the problems of our practice—has dominated these descriptions.

Nevertheless, the world of academic research has a long history steeped in the tradition of basic research, "the search for knowledge without regard to immediate and apparent utility" (Blunt, 1994, p. 184). The emphasis on empirical studies, quantitative data, and the scientific method has influenced our colleagues in such neighboring disciplines as psychology and sociology. These disciplines have informed our study of adult learners and their social contexts. Yet, as we use these resources, we tend not to continue their basic research; however, we find ways to apply it to our problems and practices.

Another perspective related to the dilemma of applied and/or basic research concerns the tension between quantitative and qualitative methodologies. Basic research in the field of psychology has traditionally been quantitative in nature. Adult education, on the other hand, has been strongly influenced by both humanism and social theory. Observation and story telling emerged as strong data collection methods for recording and reporting adult learning, human growth, and change. The bias against qualitative research methodologies has been slowly eroding over the last ten years, but there remains, especially in research institutions and with many academics along with some funding sources, a strong affiliation for basic quantitative research.

This tension between quantitative and qualitative research precipitates one last thought on the basic/applied issue. Adult education is an interdisciplinary field. As practitioners, we come from a wide variety of settings and from various disciplines and training. Our literature explores the diverse philosophical underpinnings that inform our practice (Elias & Merriam, 1995). These philosophical orientations have a profound impact on both the content and the process of our research in adult education. Creating a consensus within this diversity of philosophical traditions may be unrealistic for our field. On the other hand, this diversity generates a challenge for us as

we attempt to understanding and deal with our research dilemmas.

WHO IS DOING OUR RESEARCH?

Adult education has been defined as "both a social practice and an area of academic study" (Kowalski, 1988, p.188). Graduate students who attend our universities' programs in adult education tend to come, not as the traditional student of 22 or 23, but as adult learners who are working professionals in their middle years. This group of graduate students attend part-time, are working full time, and have all the responsibilities of adult learners with which we are so familiar. Their commitment is to their professional responsibilities; their choice of study topics and research agendas tend to be related to their practitioner problems. Blunt (1994) observes that university adult education researchers, including graduate students, have been in a "Catch 22" situation. This has resulted in "practitioners holding a negative attitude toward research as they have judged the results to have contributed little value to practice, and at the same time the reputation of adult education researcher in the university community has suffered because of their focus on applied research" (p.184). The "Catch 22" is compounded by the lack of time, money, and support our nontraditional graduate students have and receive for research and its dissemination.

An even more chilling problem for the profession is the present state of our graduate schools. A recent survey of graduate adult education programs reports that while enrollments were increasing, programs where being eliminated (Harrison, 1995). The survey also found that faculty growth did not keep pace with these enrollment increases. In fact, the only faculty increase was in the use of part-time faculty. These data have several implications for our research agenda in adult education. Universities have traditionally been the site of basic research, the locale where full-time faculty have possessed the career goals, motivation, and resources to address research problems. With a decrease in the number of programs, where will the research be conducted? As more and more programs utilize part-time faculty, who will not only conduct the research, but also mentor and direct graduate students in theirs? Part-time faculty tend to be practitioners with full-time commitments in other arenas and with little or no experience in basic research. Here again we see the continuation of our focus on the applied, practitioner-oriented research agenda.

WHERE IS OUR RESEARCH?

Looking for our research can be our greatest challenge. We have a discipline which says, on the one hand, that we have a critical need to do more research because we have done so little basic research in the past (Blunt, 1994; Kowalski, 1988). On the other hand, there is a "significant knowledge base" (Merriam & Caffarella, 1991) in our field, as well as in related fields of study. Imel (1989) outlines the resources of this knowledge base by referring to the sources of documents. She cites Long's calculations of 3,000 plus doctoral degrees in adult education completed by 1987 with the implication of their availability through *Dissertation Abstracts International*. However, Mason and Lifvendahl (1994) pointed out recently that "a significant number of adult education departments and their universities have not fully cooperated with UMI

[University Microfilms International, vendor of record for most dissertations]; consequently, the UMI data base is not complete" (p.125). Imel (1988) also points out that much of our literature can be categorized as "fugitive materials" (p.135), the descriptive term for our little-published or hard-to-come-by materials, such as pamphlets, brochures, conference proceedings, papers, and government-funded project reports. Sources such as ERIC (Educational Resources Information Center) now provide us with access to many of these fugitive materials. Again, as with dissertations, adult educators have the responsibility to submit their work for inclusion in these data bases; their failure to do so means that considerably more research has been done than has been reported and, consequently, made available to the larger adult education community.

As we seek to find "the latest" in research and theory building in adult education, we are challenged by the tremendous advances in technology over of the past several years. This phenomenon, too, has had an impact on our perception of the origin and quantity of adult education research. As our libraries go "on-line" and computer data bases provide access to an overwhelming number of bits of information, adult educators need to be wary of this so-called abundance of information. There are two issues here: selectivity and access.

As an increasing amount of information goes "on-line," we need to think about who is selecting the information and what are the parameters with which it is defined. Many of us have sat down at a computer terminal to search a topic, intuitively knowing that there may be a rich reservoir of information. Nevertheless, we come up empty handed. Clifford Stoll (1995) appraises critically this situation as he considers the future of libraries within the context of the information highway. He shares his concern that library research, along with the use of traditional research skills, is part intuition and part serendipity. He cautions us that computerization of data has short circuited these traditional skills. He also cautions us that someone, somewhere is making the decisions concerning what to put into the data bases and how to define this information. Biases of selectivity abound. A sentimentalist who finds joy in card catalogs, Stoll presents a useful lesson for us. The research is there; finding it is the challenge of the technology revolution.

Adult educators come from a long tradition of being concerned about access. With technology taking over our libraries, most of us—our students included-need to develop and hone computer skills. Availability of training and equipment, and funding to support both, are crucial for on-line searching and retrieval. Computer phobia and anxiety are real issues for returning graduate students whose previous experience in libraries required different skills and little knowledge of technology. Equity and access raise many questions for faculty as they give assignments to, and direct the research of, their graduate students. What impact do these questions have on our perception of research in field of adult education?

DOES FUNDING MAKE A DIFFERENCE?

Unlike many areas of basic research, which are funded by such agencies as the National Endowment for the Humanities and the National Science Foundation, areas of practice, including adult education, do not possess a similar resource. Our research is often self-supported or

receives funding from limited, internal sources. Frequently the internal funding available for faculty research offer such small amounts of financial assistance that the time and energy required for developing proposals don't seem worth the effort. That time and energy could be put into the research itself, and often with more profitable results.

What funding is available still emphasizes the practice aspects of our field. Since most government funding for adult education programs is channeled into adult basic education, literacy, training of re-entry women, retraining of displaced workers, and the like, these are also the arenas which receive whatever funds exist to support research. For example, in the Commonwealth of Pennsylvania, the single greatest amount of research funding in adult education supports 353 projects. These projects may or may not include research components; when research aspects are present, they emphasize practice.

WHY ARE WE NOT DOING RESEARCH?

Well, it seems that adult educators are doing research; graduate students in adult education are doing research; and our colleagues in other disciplines are also doing research to find the answers to their questions about the learning, development, and education of adults. What is it about our field that prompts us to ask such questions? It is time to reflect on this perspective. This symposium provides an opportunity to discuss these questions, to review both those areas in which we are carrying out prolific research and those where there appear to be "holes." This discussion will foster recommendations, including topics for research which go beyond the lists suggested by Kowalski (1988), Deshler and Hagan (1989) and Blunt (1994). Recommendations for publication and dissemination of the adult education literature will encourage both faculty and graduate students to take responsibility for our discipline and its future by increasing our knowledge base, both basic and applied.

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